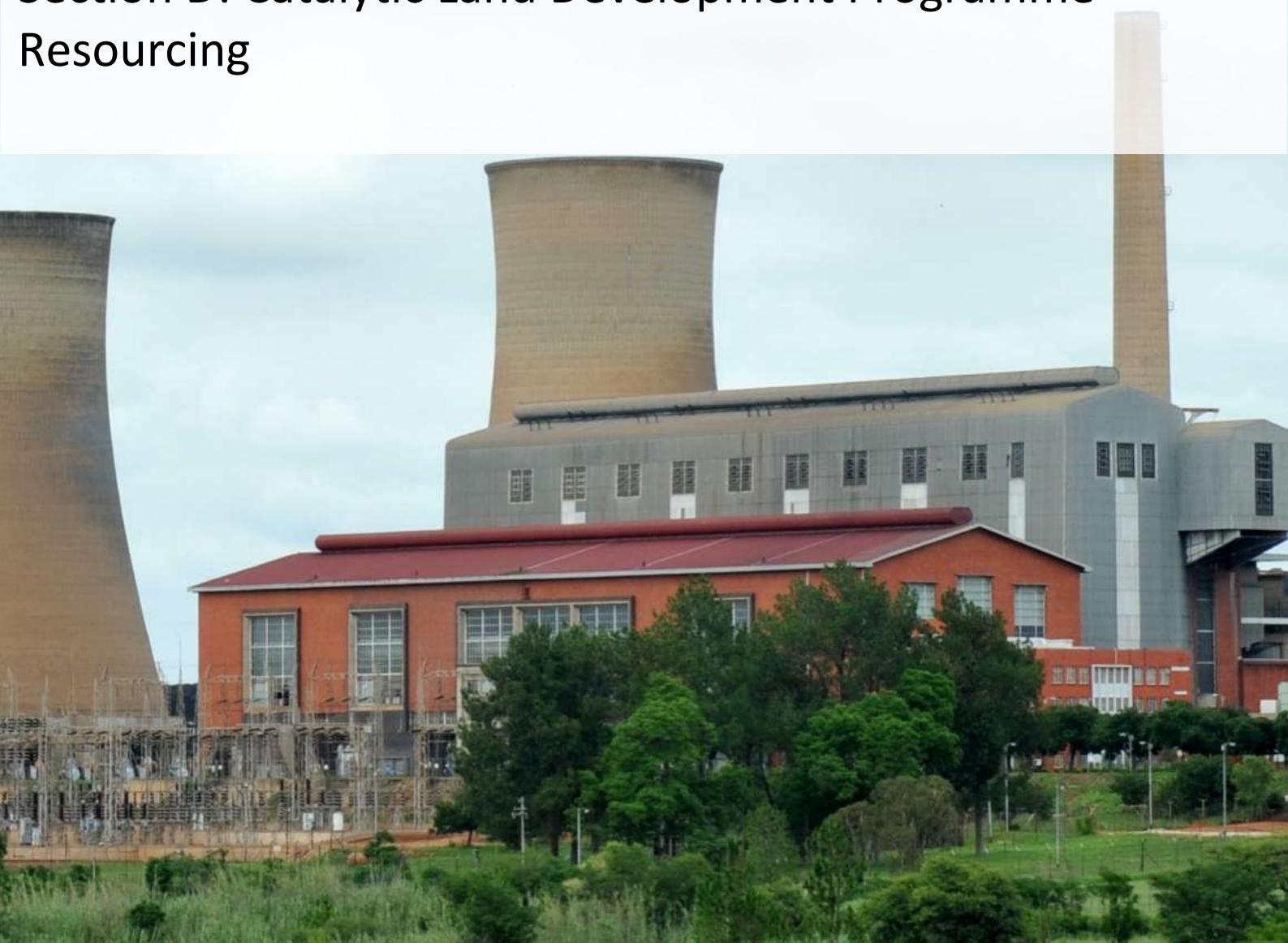


## Section D: Catalytic Land Development Programme Resourcing



---

## Section D: Catalytic Land Development Programme Resourcing

Section C focussed on the identification, delineation and preparation of Catalytic Land Development Programmes (CLDP) through identifying spatially targeted focus areas for investment. Spatial priorities and achieving the outcomes for catalytic land investment should receive priority during the allocating of financial resources in order to catalyse capital investment towards spatial transformation. This aligns with the City's principle to achieve spatial transformation, but critically also requires focus on sustainable financial resourcing to achieve this.

In terms of the City's Theory of Change, the principle for the City to achieve financial sustainability builds on the principles of spatial transformation and collaborative planning, implementation and management. Sections B and C focussed on the "where?" and the "why" of capital investment, whereas section D will focus on "how?" these strategies will be financed sustainably as well as building a strategy to achieve and maintain sustainable financial growth and investment. Although the majority of Section D focusses on the principle of financial sustainability, outcomes from the spatial transformation principle plays a vital role in establishing the foundation for financial resourcing and ensuring good governance practices.

Figure 60 Theory of Change



---

The principle of financial sustainability shapes the vision of achieving an integrated Long-term Financial Strategy (LTFS) to guide and facilitate sustainable resourcing of capital investment. The outcomes required to achieve this includes the determination of a sustainable affordability envelope and optimal funding mix through integrated long-term financial planning, improved financial management, scenario planning through testing of CLDP affordability and an annual budgeting process which adheres to good finance and planning standards and best practices.

Actioning these outcomes include the utilisation of a Long-term Financial Model (LTFM) as part of the annual capital budget planning and preparation process. This will guide the City in determining sustainable and affordable funding envelopes, based on a sustainable mix of funding resources, and applying this to the capital project investment portfolio (CLDP) to determine the optimal capital project investment list based on spatially targeted prioritisation. Through actioning these outcomes, the City will achieve an integrated capital investment budget which supports spatial transformation and sustainable development. The City will also achieve quantifiable targets which supports and informs decision making to achieve long-term financial sustainability together with sound governance principles.

In terms of the BEVC, the following section has been structured to align to the third component within the value chain and describes the process of catalysing spatial transformation through the use of a LTFS to sustain the investment portfolio.

To achieve this, the City has established the use of a spatially enabled Capital Planning and Prioritisation System (CAPS) to identify and prioritise capital investment portfolios (CLDP). The prioritisation process considers, amongst other things, the economic impact and spatial priorities of Tshwane. Once prioritisation has been undertaken, the prioritised portfolio of projects is subjected to a rule-based budgeting process in order to prepare a budget scenario. In this process, provision is made for minimal subjective manual intervention and adjustments to the capital budget. Depending on the extent of the adjustments made, the final recommended budget-book is tested in terms of strategy alignment to ensure that the budget scenario is responsive to the strategic and spatial priorities of the City. Refer to Chapter 18 Budget Scenario, for a detailed description of the budgeting process and results.

In a concurrent and iterative process, the City's LTFM is developed, refined and applied making use of the City's financial history, its funding position, economic outlook and a number of other considerations. One of the functions of the LTFM is to provide a basis and serve as input in developing a LTFS for the City. The LTFS serves as a medium- to long-term financial roadmap for the City and provides strategic direction on financial management and policy choices to be considered for implementation to improve and sustain the financial position of the City.

## **17 Long-Term Financial Sustainability**

### **17.1 Introduction**

The City of Tshwane makes use of a Long-term Financial Model (LTFM) to inform the Medium-term Revenue and Expenditure Framework compilation. The model is updated taking into consideration economic changes, guidelines from the national and provincial spheres, strategic and policy direction of the municipality to ensure sustainability and goal orientated service delivery.

The LTFM is utilised to ensure financial affordability and sustainability over the medium to long-term and is considered a key financial planning tool.

This preliminary report provides an overview of the main findings of analysis on the City's current external environment and the results obtained from the long-term financial model. Information used in this analysis was obtained from the 2018/19 Consolidated Annual Financial.

## 17.2 Findings

The section provides both a summary of historic financial analysis for the period 2011-2019 and a forward-looking 10-year forecast from the current FY 2020 to FY 2029.

Based on the historic analysis the following are important:

- The CoT has the capacity to generate significant cash from its own operations, with a Redemption fund of R889 million; Short-term Investments of R3.6 billion and a bank and cash balance of R334 million at the end of FYE2019;
- Capex has however slowed down from levels of over R4.6 billion to FYE2016 to just over R3.3 billion in FYE2019.
- In recent years the Balance Sheet position improved from unsustainably high levels of gearing and weak liquidity position to more manageable levels of gearing and an improved liquidity position.
- Historic expenditure levels are highly dependent on the ability of the City to maintain a collection rate closer to 95% than the 90% at the end of FYE2019.

LTFM forecast:

- On-going urbanisation placing further pressure on the city's infrastructure;
- A slow-down in the economic growth rate also impacts on the City's financial position;
- Capital expenditure is slowed down over the MTREF-period but then accelerates at an average of 4,0% per year up to 2030;
- These new levels of Capex are forecast to be increasingly funded through borrowings;
- But Debt Servicing and Gearing remains within Treasury norms, largely due to revenue from own sources and cash generation capacity of the municipality;
- The Scenario Analysis, which tests an increase or decrease in the revenue collection rate to determine the resilience of the City's financial position, indicates how sensitive the City's financial position is to changes in some variables.
  - For instance, the liquidity position becomes negative if the debtor's payment ratio remains at the current level (90%).

## 17.3 Infrastructure Perspective

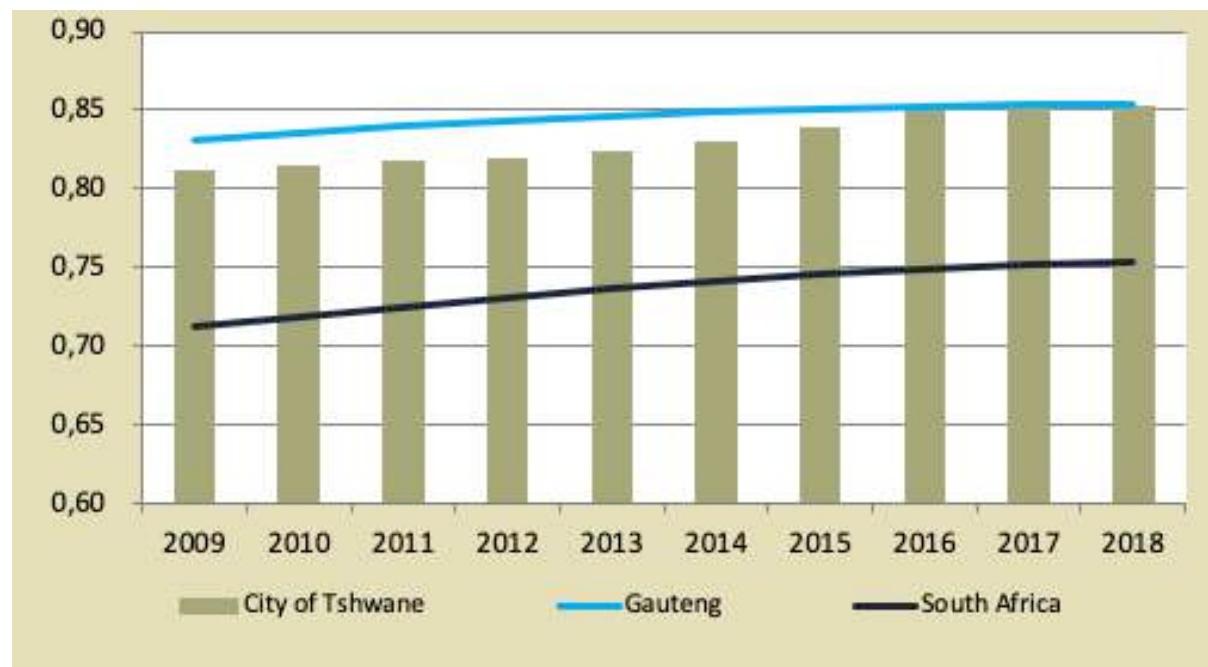
### 17.3.1 Household Infrastructure

#### 17.3.1.1 Infrastructure Index

The average Infrastructure Index (2008-17), a population-adjusted, access-to-service weighted index which measures a region's overall access to household infrastructure of 0.85 equals the provincial

average and exceeds the national index of 0.75. The City's service backlogs decreased during the period, however remained relatively high with regards to sanitation and refuse removal services.

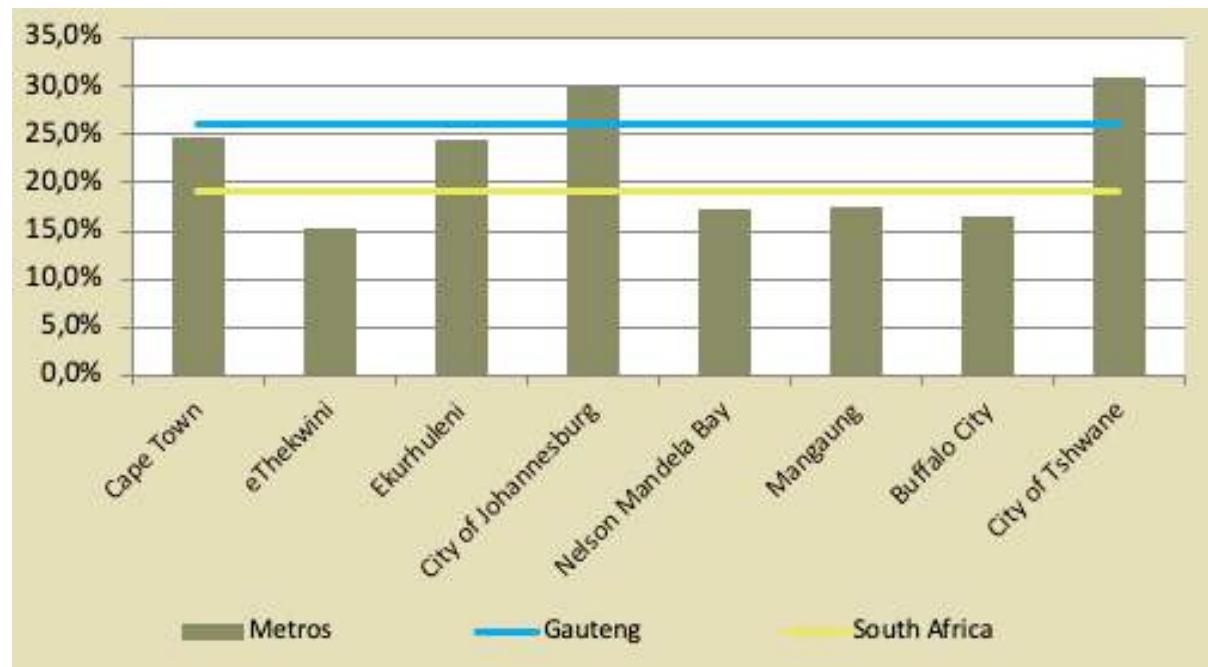
Figure 61 Infrastructure Index (Source: IHS Global Insight)



### 17.3.1.2 Number of Households

City of Tshwane experienced an increase of 31% in the number of households between 2009 and 2018 which is the highest of the metros in the Country, also higher than the provincial and national average. In 2018 there were approximately 1 100 000 households in the City of Tshwane.

Figure 62 Number of Households



### 17.3.1.3 Household Infrastructure Provision

By comparing backlogs of sanitation, water, electricity and refuse removal in urban as well as non-urban areas one notes that CoT's infrastructure service delivery backlogs with regards to sanitation and refuse removal is higher, while the infrastructure service delivery backlogs with regards to water and electricity is lower.

Table 18 Household Infrastructure Provision (2018)

Infrastructure	Gauteng	City of Tshwane	
<b>Above RDP Level</b>			
Sanitation	3 156 190	89,0%	663 683
Water	3 410 805	96,2%	783 735
Electricity	3 037 710	85,6%	703 466
Refuse Removal	3 152 346	88,9%	669 324
<b>Below RDP or None</b>			
Sanitation	390 859	11,0%	156 459
Water	136 243	3,8%	36 407
Electricity	509 338	14,4%	116 676
Refuse Removal	394 702	11,1%	150 819
<b>Total Number of Households</b>	<b>3 547 048</b>	<b>100,0%</b>	<b>820 142</b>
			<b>100,0%</b>

## 17.4 Financial Model

### 17.4.1 Affordable Future Capital Investment

The total Capex demand is determined as part of the capital prioritisation exercise. Affordable Capex in the draft MTREF amounts to R11.2 billion. Results of the long-term financial model show an affordable capital expenditure envelope for the 10-year planning period of R45 billion, as seen in Table 3. This amount is subject to the City's optimal performance as well as stability in external factors (economic and demographic indicators) based on the assumptions used in the model. The proposed Capex funding mix for both the MTREF and LTFM results are respectively and briefly discussed hereafter.

#### 17.4.1.1 MTREF Capital Funding Mix

The City's MTREF budget 2020/21 – 2022/23 expects a capital budget amounting to R11.2 billion and funded as follows:

Table 19 MTREF Capital Funding Mix

R'm	Total	2020/21	2021/22	2022/23
Grants	5 191	2 099	1 533	1 558
Financing	4 500	1 500	1 500	1 500
Internally generated funds	1 096	232	370	493
Public Contributions	450	150	150	150
<b>Total</b>	<b>11 237</b>	<b>3 982</b>	<b>3 554</b>	<b>3 701</b>

The model accommodated the increased borrowing of R4.5 billion, Internally Generated Funding of R1.1 billion and Capital Grants of R5.2 billion for the MTREF period of 3 years to 2022/23 and allowed the model to calculate the future funding mix. Here the potential impact of the strong liquidity

position on capex is noted. Following sustained increases in the capital expenditure after 2011 when capital expenditure doubled, this now slows down over the MTREF-period to under R4 billion per annum in line with declining grant contributions. To keep pace with anticipated population growth and ongoing investment in new infrastructure as well as upgrading and renewal projects, the capital expenditure increases from R3.7 billion in 2022/23 to R5.7 billion in 2029/30.

The annual capital investment as budgeted by the municipality remains stable. This is further reflected by the positive gearing and debt service ratios which remain mainly below the National Treasury norms.

The capex budget of the City is financially feasible. Important to note however is that there is limited cash available to cover the minimum recommended liquidity level (after the MTREF period), to cater for unspent conditional grants, short term provisions, and working capital. These findings are illustrated in the graphs below.

#### **17.4.1.2 10-Year Capital Funding Mix**

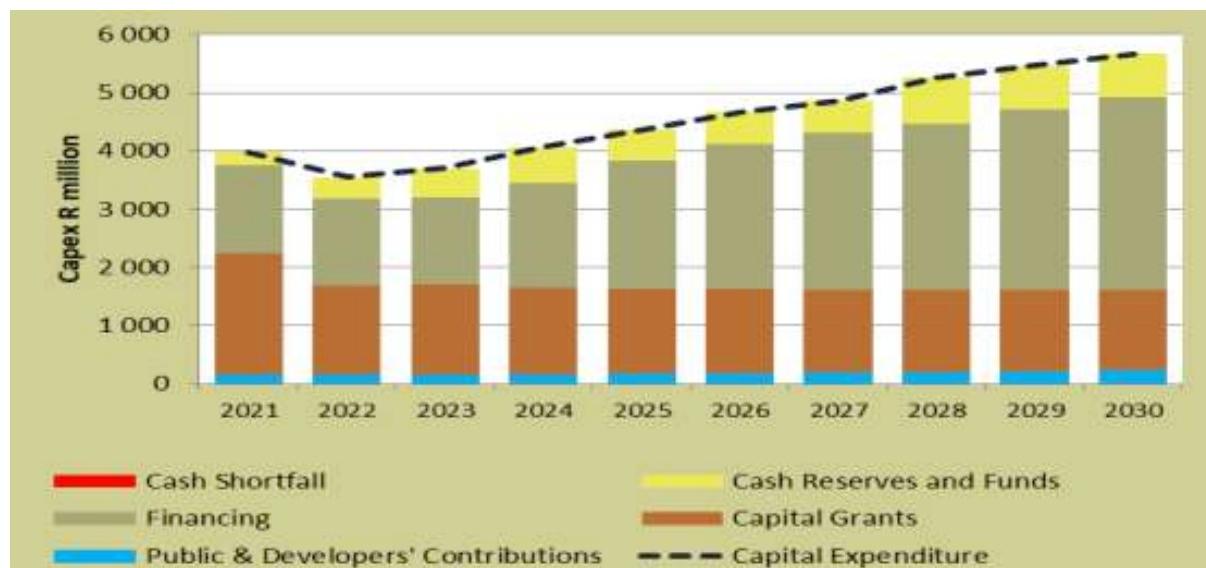
Due to the prevailing national fiscal constraint, reliance on grant funding in future is probably doubtful and the proportional amount of capital transfers in this latest estimate, when compared to previous estimates, has declined.

A balanced funding mix, incorporating a conservative level of external borrowing, will preserve own cash resources and will improve long term financial sustainability. The long-term financial model proposes the optimal funding mix below for capital expenditure over the next 10 years. This level of external borrowing will not result in a material breach of gearing or debt service ratio benchmarks.

Table 20 LTFM Capital Expenditure Envelope for the 10-Year Planning Period

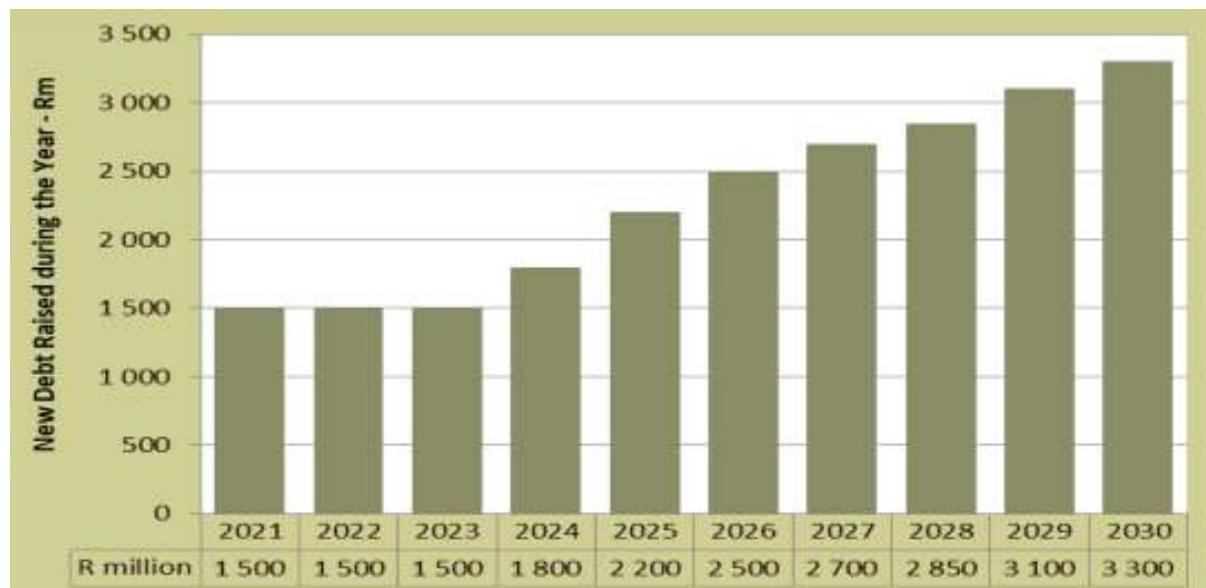
Year	MTREF	2024	2025	2026	2027	2028	2029	2030	10 yrs Total
Capital Grants	<b>5 191</b>	1 489	1 466	1 452	1 432	1 417	1 406	1 395	<b>15 248</b>
Financing Internally generated funds	<b>4 500</b>	1 800	2 200	2 500	2 700	2 850	3 100	3 300	<b>22 950</b>
Public Contributions	<b>450</b>	154	163	174	184	196	209	154	<b>1 754</b>
<b>Capital Expenditure</b>	<b>11 237</b>	4 066	4 367	4 667	4 868	5 269	5 470	5 671	<b>45 616</b>

Figure 63 Forecast Period: Capital Funding Mix



Based on the forecast External Financing requirement, the Debt Service to Total Expense Ratio exceeds the 9% benchmark only in 2023 and 2026 as loan repayments become due, but remains below the benchmark for most of the period. After a period of marginal decline over the MTREF-period, External Financing increases by about 12% per year. The amount of annual external financing is estimated to be distributed as follows:

Figure 64 Forecast Period: New Debt Raised

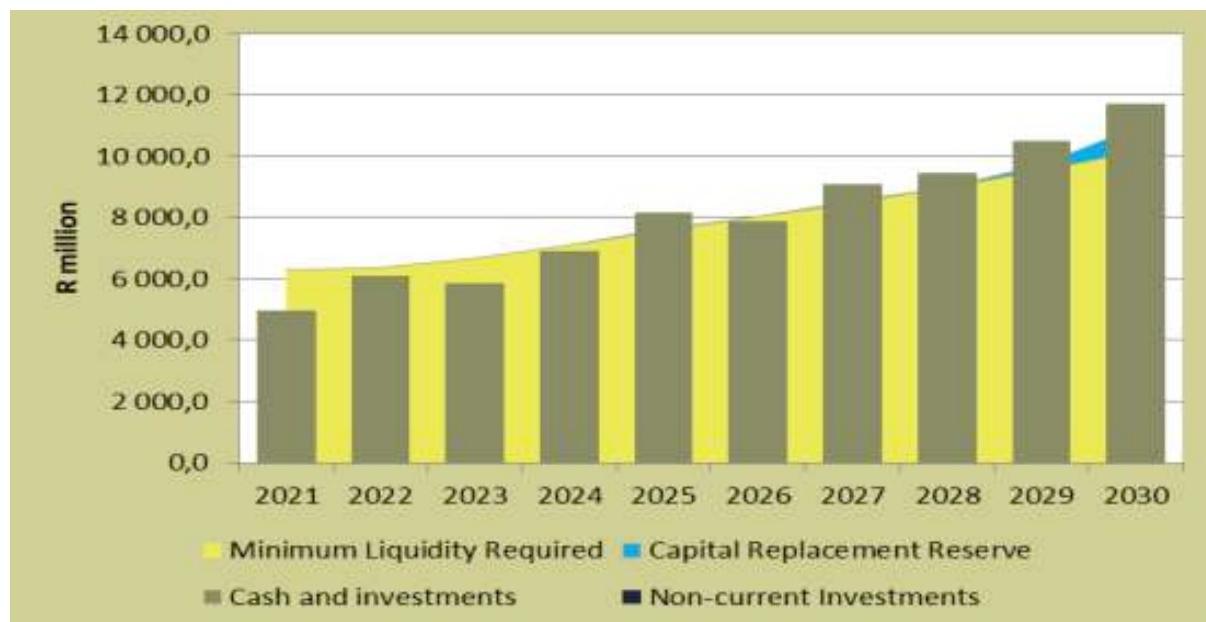


#### 17.4.1.3 Cash and Investments

The City's projected cash and investments gradually increases from R5 billion at FYE2021 to a peak of around R12 billion at FYE2030. During the MTREF-period, the City falls below the minimum liquidity requirements over the MTREF but thereafter the situation starts improving to the extent that capital replacement reserves are being created in later years. For purposes of the projections the minimum required liquidity level caters for unspent conditional grants, reserves, short term provisions, consumer deposits and 2 months working capital. The total minimum liquidity required reflects an

increasing trend through the planning period from R6.3 billion to R10.2 billion in 2030; thus, leaving a surplus of R1.5 billion at the end of planning period.

Figure 65 Forecast Period: Cash vs Minimum Liquidity Levels

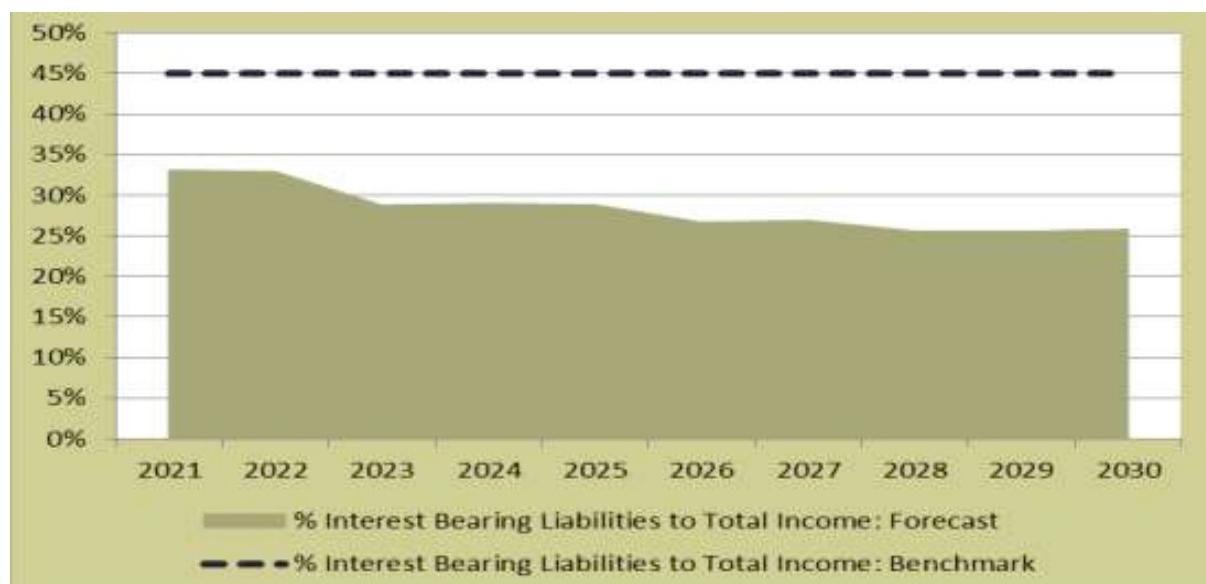


The current cash and investments improves over the planning period to cover the minimum liquidity requirement between 2021 – 2030 and provision is made for the CRR.

#### 17.4.1.4 Gearing

The ratio of Long-Term Interest-Bearing Liabilities to Income is illustrated in the graph below. Considering the size of the City and its financial ability, a maximum gearing ratio of 45% should be affordable. The model forecast that gearing remains below 32%, from 2021 throughout the planning period. This is well within the National Treasury guidelines.

Figure 66 Forecast Period: Gearing



The affordability of the projected capex depends on the optimal performance of the City and a stable socio-economic environment. A scenario involving no increase in the revenue collection rate has been tested to determine the resilience of the City's financial position. The results of the scenario testing are given below.

#### 17.4.1.5 Ratio Analysis

The Base Case forecast ratios are presented below. Although the model is not programmed to measure the ratios as required by National Treasury in all instances, it does provide comfort that the municipality is sustainable in future - on condition that it operates within the assumed benchmarks set in the financial plan.

Table 21 Ratios

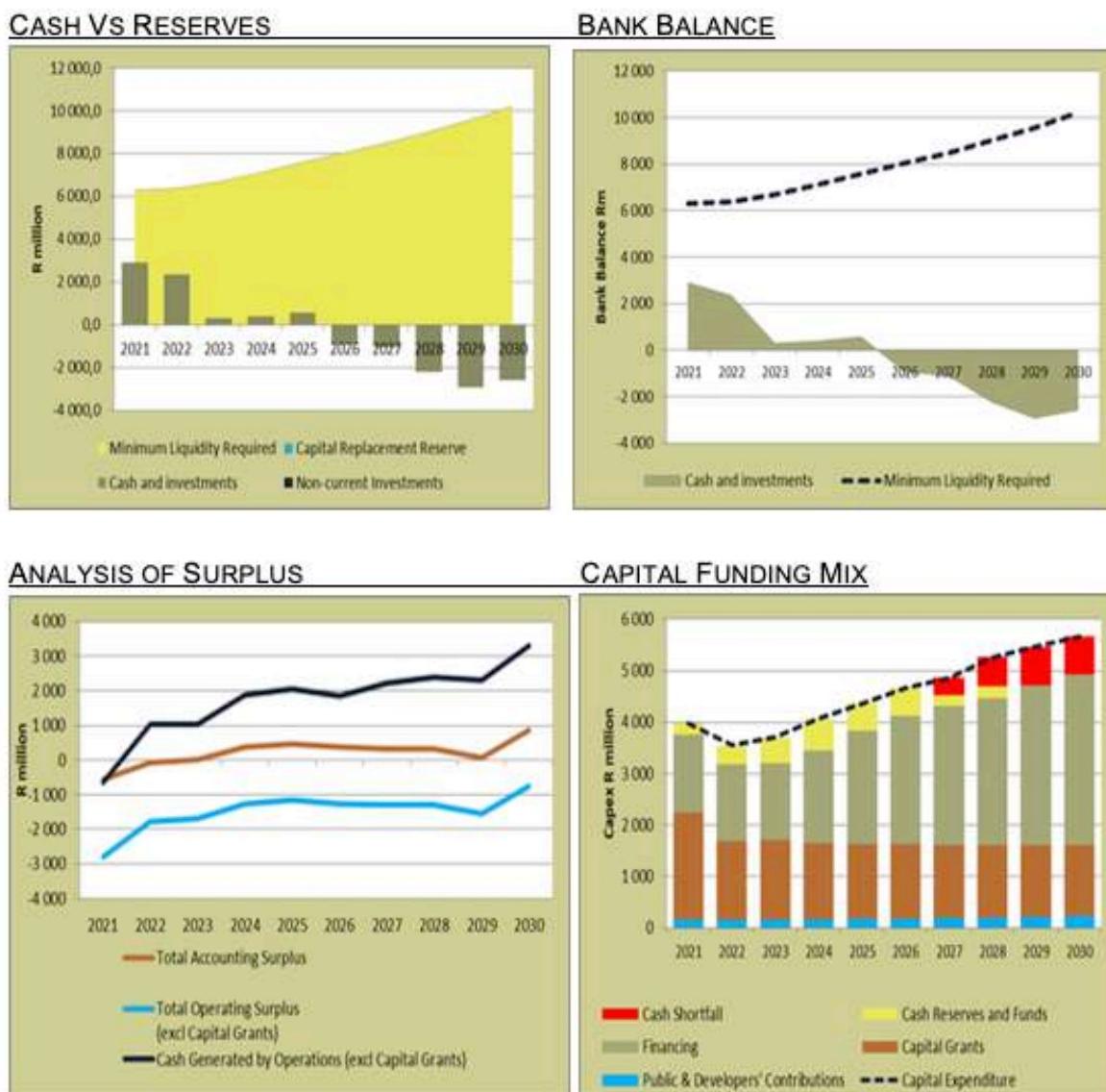
Ratio	Norm	2020/21	2022/23	2024/25	2026/27	2028/29	2029/30
Cash Generated by Operations / Own Revenue		8,7%	12,6%	11,5%	11,0%	10,5%	10,1%
Liquidity Ratio (Current Assets : Current Liabilities)	1:1,5 - 1:2,0	1 : 1	1,1 : 1	1,1 : 1	1,1 : 1	1,3 : 1	1,3 : 1
Cash Surplus / Shortfall on Minimum Liquidity Requirements (R'm)		- 1 402	- 914	489	505	821	1 409
Cash Coverage Ratio (incl Working Capital)		0,8 : 1	0,9 : 1	1,1 : 1	1,1 : 1	1,1 : 1	1,1 : 1
Capital Expenditure / Total Expenditure	10% - 20%	9,3%	8,2%	8,4%	8,4%	8,3%	8,1%
Total Debt (Borrowings) / Operating Revenue	45%	35,1%	30,0%	29,8%	27,7%	26,3%	26,5%
Debt Service Cover Ratio (Cash Generated by Operations / Debt Service)		1,1 : 1	1,1 : 1	1,6 : 1	1,5 : 1	1,3 : 1	1,4 : 1
Total Grants / Total Revenue		17,5%	16,6%	15,2%	14,4%	13,6%	13,3%

### 17.5 Scenario Analysis

#### 17.5.1 Scenario Analysis: Collection Rate Remaining at 90%

A scenario analysis is performed to see the impact of no increase in the City's debtor's collection rate of 90% in 2018/19 over the MTREF period and for the remaining years, the collection rate is 93%. The model reflects that the low collection rate will have a negative impact on cash resources and the long-term financial sustainability of the municipality.

Figure 67 Scenario Analysis: Collection Rate Remaining at 90%



The low debtors' collection reflects these financial consequences:

- Consistent operating budget deficits over the 10-year forecast.
- A negative cash and investment balance of -R2 577 million at the end of the planning period.
- Weak liquidity ratios decreasing from 0,8:1 to 0,4:1 by year 10.
- There are insufficient cash surpluses to contribute towards a funding mix for capex from 2027 onwards.
- Number of months cash coverage ratio decreases to 0 times.
- Cash and short term investments decreases annually from R2 899 million in 2021 and is completely depleted by 2026.

## 17.6 Outcomes and Risks

### 17.6.1 Outcome of the Financial Assessment

The City remained in a positive position during the past 9 years of assessment. This was demonstrated by an Accounting Surplus of R2.8 billion posted as at FYE2019, which increased from R1.3 billion in FYE2011.

Positive to note is that the City still managed to generate an operating surplus of R969 million compared to R807 million in 2011 when capital grants are excluded.

The strong financial performance enabled the City to generate R2.6 billion in cash from its operations (excl capital grants). This was R1.1 billion higher than the cash generated from operations in FY2011.

In the past 9 years, the municipality spent R31.8 billion on capital infrastructure programmes utilising Capital Grants to the value of R17.5 billion, Borrowings and internally generated funds of R7.7 billion. The annual capital expenditure gradually increased from R2.2 billion in FY2011 to the highest of R4.6 billion in FY2016 after which it declined to R3.3 billion in FY2019.

#### 17.6.1.1 Strengths

- Strong balance sheet & improved liquidity position
- Investment-grade credit rating
- Strong cash flow from own operations and limited reliance on transfers from national and provincial treasuries
- The positive increase in Cash and Cash Equivalents.
- Capacity to post Accounting and Operational Surpluses.

#### 17.6.1.2 Weaknesses

- The collection ratio of 93% in 2017/18 and 90% in 2018/19 remained below the minimum acceptable benchmark of 95% and threatens the City's future affordability.
- Decreasing annual capital expenditure since 2017, despite the current high service delivery backlogs.

### 17.6.2 Outcome of the forecast model

#### 17.6.2.1 The socio-economic base and future revenue

- Strong economic base and diversified economy, but rapid increase in migration to the municipal area placing pressure on existing infrastructure;
- However – national conditions also impact on the municipality – with only moderate growth forecast over the forecast period;
- A key structural weakness can now be identified: as economic growth rates slow, the municipality approaches the limits of increased tariffs to extract additional revenue for ever-growing needs of poorer communities;

- To pursue and sustain progressive / redistributive / pro-poor policies – it is essential that the economic base expands and critically, job creation (especially at entry-level) accelerates.
- Over the forecast period – there is still scope for increased tariffs (broadly aligned with CPI) and for more progressive tariff structures.

### **17.6.2.2 Capital investment**

- As the population continues to increase, the municipality needs to deal with normalising historic settlement patterns to accommodate new migrants and improve access to and mobility within the municipal area;
- Capital expenditure is increasing over the planning period;
- It is also evident that it cannot do so by using its own cash resources;
- Whilst capital expenditure and external financing remains at current levels over the MTREF period, both capex and external loan financing increases per year after the MTREF period;
- Even at this rate of increase both Debt Servicing and Gearing levels remain within the National Treasury norms;

### **17.6.2.3 Scenario analysis**

- The scenario analysis explored the implications of a situation where there is no improvement in the debtor's collection rate and remaining below the accepted norm. A consistent collection rate of 90% over the MTREF and 93% for the rest of the panning period negatively impacts the liquidity position and capex affordability;
- Two aspects worth noting: Capital expenditure is largely similar when comparing the Base Case to the scenario however cash shortfalls are experienced in the last four years, and secondly the Cash Position drops significantly over the period.

## **17.6.3 Risks to the 2020/21 MTREF Estimates**

### **17.6.3.1 Revenue**

Revenue collection is generally under pressure as a result of existing poor economic conditions in the country. The situation will be exacerbated by the impact of the Covid19 pandemic and the response by government and the global community. Although the impact cannot be quantified yet, indications are that it will further constrain the ability of customers to pay for municipal services.

It is essential that the City achieve the budgeted collection rate of 95%, if not cash generation will be under pressure.

- **Electricity**

Electricity revenue is the largest source of own revenue for the City. The electricity revenue budget has been based on an estimated decreasing demand for the service which is in line with growth trends over the last five financial years. If billing and collection of this revenue does not realise, the sustainability of the electricity services function will be negatively impacted as well as the potential for cross-subsidisation of other municipal services.

- **Distribution Losses**

The programmes that has been put in place to reduce distribution losses in the City is of vital importance. An increase in electricity and water distribution losses of 0,2% per annum respectively has the potential to reduce cash at year-end by approximately -2.1% per annum over the MTREF.

#### **17.6.3.2 Expenditure**

- **Employee Related Costs**

The implementation of the benchmarking exercise will have a step-change effect on employee related costs. As the City implements the in-sourcing of security services, the movement between contracted services and employee related costs can potentially cost more due to additional employment benefits and concomitant costs.

- **Repairs and Maintenance**

Expenditure on repairs and maintenance is yet to reach the norm defined by NT. Poor implementation of the planned expenditure will result in further deterioration in the City's infrastructure, distribution losses and revenue.

- **Bulk Purchases**

Increasing distribution losses coupled with decreasing demand for services is disastrous. If distribution losses are going to increase while the demand for the services are decreasing, bulk purchases will become unaffordable as the City will not be able to collect revenue to pay for the bulk purchases. This will threaten the self-sustainability of the electricity and water services.

- **Depreciation and asset impairment**

There is a need to have the equivalent of the budgeted amount of depreciation and asset impairment per annum, to fund a capital replacement reserve fund. This will assist in funding future repairs and maintenance and replacement of assets. Any unauthorised expenditure on the budget will erode the potential for such a source of funds.

- **Contracted Services**

City expenditure on contracted services is proportionally larger than the National Treasury norm. Expansion of the City's employee numbers as a result the phasing-in of in-house asset protection services have to be accommodated by a phasing-out of contracted services expenditure on watchmen services.

### **17.7 Conclusion**

#### **17.7.1 Affordable investment in infrastructure**

The long-term financial model proposes the optimal funding for investment in infrastructure to be R11.2 billion over the 2021 MTREF and over the ten-year planning period at R45.6 billion. This can only be achieved if the City's budget objectives are met over the medium to long term.

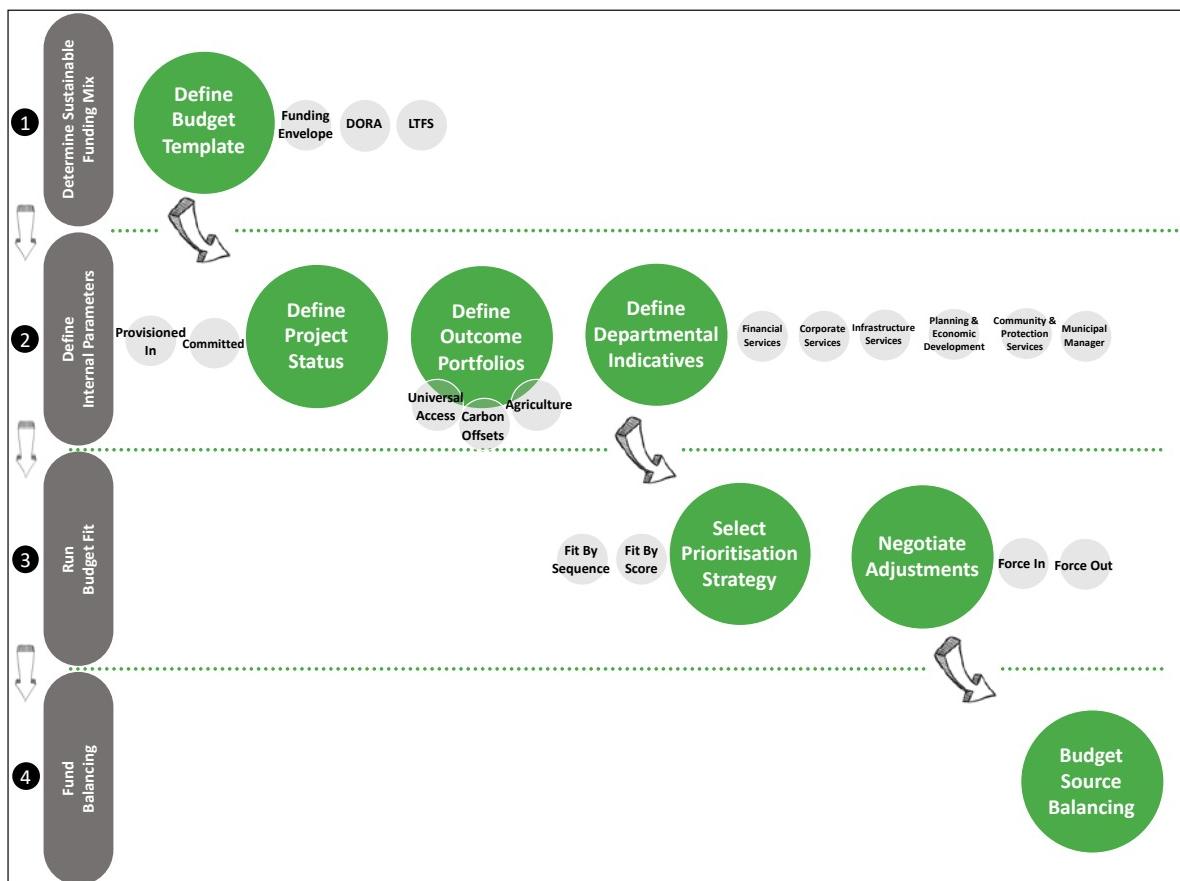
## 18 Budget Scenario

The budgeting scenario development process in the City of Tshwane, as facilitated by the CaPS system, is also known as the “Budget Fit” process. This name was derived from the process of “fitting” the project needs, in order of priority (ranking) into a finite budget, defined as the affordability envelope, modelled using a long-term financial modelling instrument (LTFM). The budget scenario development process is at its essence a mathematical rule-based process and the City is in a position to specify and configure various rules and limits in the process. These rules and limits could include, but are not limited to, annual affordability limits, departmental indicative budget limits, funding source eligibility rules, ring-fenced budget outcome segments, capital project priority or ranking etc.

The purpose of this section is to discuss the methodology, rule sets and criteria used during the budget scenario development process as well as to demonstrate how different choices regarding the budget scenario development strategies will result in different budget scenarios.

The budget scenario development methodology is shown schematically in Figure 68. This methodology is a sequential application of a set of rules and parameters that results in a project either being added to the draft capital budget or rejected from the draft capital budget.

Figure 68 Budget scenario development methodology



### 18.1 Budget Scenario Parameters

The following parameters all take part within the budgeting process.

### **18.1.1 Affordability envelope and budget fit strategy**

The affordability envelope is the sustainable and financially modelled annual total capital budget limit which the City should adhere to in order to maintain and improve its financial operational position. It is included as the total amounts which need to be fitted to during the budget fit process.

National Treasury advocates long-term planning and financial sustainability modelling as part of the BEVC. As a result, the City has utilised a long-term financial planning instrument (LTFM) to model the 10-year affordable capital funding envelope. The annual capital budget affordability values from the LTFM were used to determine the capital budget indicatives for the outer years of the Medium-term Revenue and Expenditure Framework (MTREF) (i.e. year 4 to year 10), whereas the indicatives as determined by the City's Finance department through the published Division of Revenue Act (DORA) allocations together with the existing long-term financial commitments from capital projects on the MTREF budget were used for the MTREF Period. The differences between these indicative amounts from the Finance Department and the amounts from the LTFM affordability envelope amounts are not significant as the input published draft 2020/21 MTREF capital budget is an input to the LTFM modelling process. Thus, the City's Finance Department opted to use a combination of both to build the 2020/21 budget scenario (Refer to Chapter 18.3.2 for an analysis in this regard).

***It should be noted that the draft version of the 2020/21 capital budget (23 March 2020) was used to establish the multi-year financial commitments for the budget fit scenario process. All of the analysis relating to the budget has been based on this version and will be updated once the 2020/21 MTREF budget has been finalised.***

Different strategies may be followed in the application of the affordability envelope during the budget fit process. The affordability envelope sets the upper limits of the annual budget targets over the period of the budget fitting process. Based on the City's strategic intent, the affordability envelope may be further broken down in components, for example Portfolios limits, Stage Gate limits, or Department limits, or a combination of aforementioned. The sequence in which these budget fit rules are organised, determines the outcome of the budget fit process. During the fit process, once the total budget limit per year has been depleted by fitting projects, projects which do not fit in that particular budget year based on financial year budget constraints will roll over to the next financial year cycle and attempt to fit the project in subsequent financial years.

### **18.1.2 Project score**

Project scores were determined according to the methodology and with the results as outlined in Section C of this report. The purpose of a project score is to determine a relative ranking between all the projects within the list of capital demand projects. Projects are allocated their requested budgets in order of scored priority, within the constraints of the budget scenario rules such as available budget constraints and/or qualifying rules to access certain types of funding sources.

### **18.1.3 Project status**

For the purposes of the budget fit process, specific project statuses are required to take into account the multi-year financial impact of projects published on previous financial year budgets. A project's status is based on an assessment of its actual physical and financial progress at the time of performing the budget fit. The statuses available for allocation are:

- **Committed** – Committed status may be allocated to projects which formed part of either the approved MTREF capital budget (Annexure A to the IDP) or the adjusted MTREF capital budget (Annexure B to the IDP) of the City for the previous financial year, and which are contractually committed as assets under construction or having concluded the

---

procurement processes. Termination of any committed projects will result in either legal or financial liability for the City. Given commitments made on these projects by the City, the budget fit methodology regards these projects as non-negotiable, irrespective of their capital prioritisation model project score or the financial year budget constraints. This means that projects which carry Committed status will be fitted to the affordability envelope in the financial year in which they request funds (no delays may be applied). Should the total of Committed projects exceed the affordability envelope for a given year, the budget fit will allow these projects to “overfit” the available amount for that particular year.

- **Provisioned-In** – Provisioned-In status may be allocated to projects which formed part of either the approved MTREF capital budget (Annexure A to the IDP) or the adjusted MTREF capital budget (Annexure B to the IDP) of the City for the previous financial year, but which are not contractually committed as assets under construction or those projects which have not concluded their procurement processes. Termination of any provisioned projects will not result in either legal or financial liability for the City. The budget fit methodology regards these projects as having a higher priority than projects without any status in the list. This is due to the fact that they formed part of the previous MTREF submitted capital project programme, although their implementation timeframes may still be negotiable. Projects with this status will be fitted to the affordability envelope in the financial year in which they request funds only to the extent that it does not exceed the available affordability envelope in a given year. If the requests exceed the affordability envelope at any sub strategy within the combined strategy, provisioned projects may be fitted with delay to a financial year with sufficient available affordability envelope. These projects will not be allowed to “overfit” the available amount for any particular year.

#### **18.1.4 Year of budget request**

Specific budget requests per project may be made in a specific year or over a number of years, depending on the planned implementation lifecycle of a project. During the budget fit process, requests may be fitted with delay i.e. in financial years later than the years in which the funds were requested. This allocation is based on the available affordability envelope per year, project statuses and project scores.

#### **18.1.5 Project budget request**

The project budget request is considered across the total lifecycle of the project. The City of Tshwane previously only budgeted across the MTREF. During the 2020/21 budgeting cycle consideration was given to expanding it to longer-term planning (10 years) and provided the opportunity to consider a budget scenario beyond the MTREF Period. This decision was taken based on the capital demand and capital project planning from departments extending beyond the MTREF, and to align the capital budget process output with the requirements of SPLUMA in terms of the preparation of a 10-year Capital Expenditure Framework (CEF).

### **18.2 Budget Scenario Fit Process**

The following process explains how the abovementioned parameters interact in order to compile a budget (refer to Figure 68).

## 18.2.1 Step 1: Define a budget template

During the first step of the budget fit process, a budget template is compiled on CaPS which includes the affordability envelope and strategy selection, as explained in Chapter 18.1.1. This is a mandatory step required to define the total amount of available capital funding for the MTREF. It may be informed by a number of sources:

### 18.2.1.1 Division of Revenue Act (DORA)

The Division of Revenue Act is published on an annual basis with the purpose of documenting the equitable share and grant allocations to all levels of government. The exact publication dates of the DORA may differ from year to year. The DORA publication sets out available grant funding to the City. Typical funding sources available to local government emanating from the DORA publication include:

- Public Transport Infrastructure Systems Grant (PTIS);
- Neighbourhood Development Partnership Grant (NDPG);
- Urban Settlements Development Grant (USDG);
- Integrated National Electrification Programme (INEP);
- Community Library Services (CLS);
- Social Infrastructure Grant (SIG);
- LG SETA Discretionary Allocation;
- Integrated City Development Grant (ICDG); and
- Housing Delft Grant.

### 18.2.1.2 Long-term financial strategy

Capital budget funding typically comprises the following funding sources:

- Own Funding: Funding generated from the City's revenue (i.e. rates and taxes).
- Public Contributions and Donations: Donations and bulk services contributions for capital expenditure to provide additional bulk capacity to service new developmental demand.
- Capital Replacement Reserves (CRR): Savings by the City for deferred capital expenditure to maintain the existing municipal asset base.
- Borrowings: External loans from the financial markets or bonds issued by the municipality to the financial markets.

The City of Tshwane Finance Department currently determines the affordable funding envelope and optimal funding mix, using a long-term financial modelling instrument (LTFM) and includes the indicative affordability envelope in the Budget Fit template.

A long-term financial strategy was determined based on the outputs from the LTFM. The LTFM is firstly used to determine the City's current financial position in terms of a number of legislated parameters such as liquidity, debt gearing, percentage own funding, the status of the capital replacement reserve and others. An appraisal is done on the historical financial performance of the City to date.

The LTFM is then used to create the most optimal roadmap over the next 10 years for the City. This roadmap takes into account the capital demand emanating from the CaPS process, sources of funding, the extrapolated future financial positions and estimated cash flows. The process informs the levels of funding that could reasonably be sustained under current assumptions. This process in turn, feeds back into the budgeting (budget fit) process that is performed bi-annually using the CaPS system.

With the two processes (LTFM) and CAPS constantly informing each other in an iterative manner, the City has the assurance of having embarked on a sustainable financial path pertaining to resourcing their capital investment plan.

### **18.2.2 Step 2: Define project Committed or Provisional Status**

CaPS allows for two different project statuses during budget fit process in order to account for the multi-year budget effect of projects which were previously published as part of either the approved or adjusted municipal capital budget. Refer to Chapter 18.1.3. After assessing the capital projects list, project statuses are included accordingly and in preparation for the budget fit process.

### **18.2.3 Step 3: Define outcome portfolios**

This is an optional step and is performed when the City has decided on a budget fit strategy which includes the use of portfolios – refer to Chapter 18.1 for an explanation. Allocation of portions of the affordability envelope to portfolios will ring-fence the allocated amounts to the specified portfolios. Only projects which are included in these specified portfolios may compete for the allocated budget amounts. A typical example of a portfolio could be the projects in support of the “climate change and resilience programme” or projects in support of “economic development”.

### **18.2.4 Step 4: Define departmental indicatives**

This is an optional step and is performed when the City has decided on a budget fit strategy which includes the use of departmental budget splits – refer to Chapter 18.1 for an explanation. Allocation of portions of the affordability envelope to departments will ring-fence the allocated amounts to the specified departments. When the budget fit is executed, projects which belong to the departments will be fitted to the ring-fenced departmental budget limit in order of highest prioritisation score or ranking to lowest prioritisation score or ranking, until the budget limit for that department has been reached.

### **18.2.5 Step 5: Define stages**

This is an optional step and is performed when the City has decided on a budget fit strategy which includes the use of stage gate budget splits – refer to Chapter 18.1 for an explanation. Allocation of portions of the affordability envelope to stage gates will ring-fence the allocated amounts to the specified stages. When the budget fit is executed, projects which belong to the stage gates will be fitted to the ring-fenced departmental budget limit in order of highest prioritisation score or ranking to lowest prioritisation score or ranking, until the budget limit for that stage gate has been reached.

### **18.2.6 Step 6: Select Prioritisation Model Run / Results**

The selection of a Capital Prioritisation Model (CPM) and its associated results is a mandatory step in any budget fit process, given that budget scenario development implies making trade-offs between project priority and financial sustainability and affordability. When the budget fit is executed, projects will be considered in order of highest priority score to lowest priority score until the affordability envelope amounts have been reached, depending on the strategy which had been specified in the budget fit template.

A visualisation of the budget fit result is shown in Figure 69<sup>6</sup>. The graph shows the ranking of projects from highest priority (on the right) to lowest priority (on the left). Each project is shown as a stacked bar in bar graph format, where the sum of the MTREF financial year capital requests for the projects (total MTREF capital budget) is shown as the height of the bar.

Figure 69 Budget fit results



The budget fit status of each project, after executing of the budget fit routine, is shown below the bar graph in colours. Each colour represents a different status. In the example provided, the orange projects represent committed projects, which means they were fitted irrespective of their CPM project score in the financial year in which they requested budget.

Green projects represent projects which were fitted based on their CPM project score in the year which they requested funding, given that there was available capital budget available in that financial year. The yellow projects represent projects that were fitted with delay. These projects received high scores on the CPM but there was not sufficient budget available in the financial year in which they requested capital funding, therefore the budget fit routine fitted them to a financial year later than they requested budget, where sufficient available capital budget was available in the budget template.

Eligible statuses include:

- **Committed:** Committed projects are those projects which formed part of either the approved capital budget (Annexure A) or the adjusted capital budget (Annexure B) of the municipality for the previous financial year, and which are contractually committed as assets under construction. Termination of any committed projects will result in either legal or financial liability for the municipality.
- **Provisioned In:** Provisioned projects are those projects which formed part of either the approved capital budget (Annexure A) or the adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality.

<sup>6</sup> The budget fit results graph is an interactive graph that can be accessed via the CaPS system used by the City. For representation purposes the graph has been filtered to only indicate projects within the Utility Services Unit.

- **Provisioned in with delay:** Provisioned projects are those projects which formed part of either the approved capital budget (Annexure A) or the adjusted capital budget (Annexure B) of the municipality for the previous financial year, but which are not contractually committed as assets under construction. Termination of any provisioned projects will not result in either legal or financial liability for the municipality and are therefore delayed in the budget fit process. A project will then be delayed to a financial year where the budget cap total has not been exceeded.
- **Fitted:** Projects that enjoy the status “fit” are projects that scores highest in relation to the remaining projects to be fit, with the provision that the budget cap total has not been exceeded.
- **Fitted with Delay:** Projects that enjoy the status “fit with delay” are projects that scores highest in relation to the remaining projects to be fit, with the exception that the budget cap total for the year in which the project requests budget has been exceeded. A project will then be delayed to a financial year where the budget cap total has not been exceeded.
- **No Fit:** This status is assigned to projects that were not able to qualify for budget.
- **No Fit – Zero Budget:** This status is assigned to projects that do not request budget.

### **18.2.7 Step 7: Negotiated adjustments (Force-in / Force-out)**

Once a draft capital budget has been developed using the budget fit process, the portfolio of projects which make up the draft capital budget needs to undergo a number of approvals. A draft portfolio of capital projects prepared following a complex, multi-disciplinary and inclusive process is unlikely to meet all the political expectations – the process was designed to be close to matching most expectations but some outliers or exceptions to the rule are to be expected. Therefore, a negotiated adjustment process is accommodated in the budget fit process whereby projects can be added or removed from the portfolio of capital projects based on motivations and representations made during budget discussion forums.

### **18.2.8 Step 8: Budget source balancing**

The last step in the budget fit process is to ensure that all available funding sources documented in the budget fit template have been utilised optimally and that none of the funding sources are over-subscribed (i.e. more is asked than what is available for that fund). The funding source balancing is also the last check to ensure that all projects which are linked to grant funding are eligible according to the funding definitions and rules as set out in the Division of Revenue Act (DORA).

## **18.3 Budget Scenario Results**

### **18.3.1 Budget demand**

The annual budget process of the City starts with a process of collaboratively collecting the capital investment demand or need across all departments in the City, in response to the various city strategies, policy documents and plans. Table 22 shows the capital investment demand for the City over the 10-year period, starting in 2020/21. The table is disaggregated by organisational department for the City.

Table 22 Capital Expenditure wish-list per Department (R'000)

Departments	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026
Agriculture & Rural Development	R25	R37	R32	R15	R7	R0
Airport Services	R72	R35	R0	R0	R0	R0
Communications and Marketing	R4	R0	R0	R0	R0	R0
Customer Relations Management	R52	R14	R6	R2	R0	R0
Economic Development and Spatial Planning	R346	R95	R110	R164	R97	R3
Electricity	R1 177	R1 174	R1 167	R1 010	R827	R56
Emergency Services	R60	R99	R163	R385	R528	R363
Environmental Management & Parks	R79	R91	R55	R62	R52	R0
Group Audit and Risk	R25	R25	R25	R25	R25	R0
Group Financial Services	R54	R11	R11	R10	R10	R10
Group Legal & Secretariat Services	R0	R0	R0	R0	R0	R0
Group Property Management	R124	R10	R10	R10	R10	R0
Health Services	R169	R522	R540	R329	R366	R0
Housing and Human Settlement	R3 036	R1 188	R762	R15	R0	R0
Housing Company Tshwane	R1 097	R736	R295	R1	R0	R0
ICT, Applications & Infrastructure	R298	R400	R330	R142	R182	R0
Integrated Rapid Public Transport Network (IRPTN)	R698	R544	R533	R234	R170	R0
Licensing	R7	R12	R0	R2	R3	R0
Metro Police Services	R524	R706	R841	R563	R675	R100
Office of the Chief Whip	R0	R0	R0	R0	R0	R0
Office of the City Manager	R23	R10	R0	R0	R0	R0
Office of the Executive Mayor	R3	R3	R3	R0	R0	R0
Office of the Speaker	R0	R0	R0	R0	R0	R0
Regional Operations & Coordination (ROC)	R87	R73	R21	R9	R9	R3
Roads and Stormwater	R1 604	R2 204	R2 326	R1 866	R2 805	R350

Departments	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026
ROC - Community & Social Development Services	R0	R0	R0	R0	R0	R0
ROC - Environment & Agricultural Management	R16	R3	R0	R0	R0	R0
ROC - Health Services	R0	R0	R0	R0	R0	R0
ROC - Housing & Human Settlements	R0	R0	R0	R0	R0	R0
ROC - Roads & Transport	R0	R0	R0	R0	R0	R0
ROC - Utility Services	R11	R0	R0	R0	R0	R0
Shared Services	R140	R30	R180	R180	R180	R0
Social Development	R0	R17	R0	R0	R40	R40
Sports, Recreation & Infrastructure Development	R184	R252	R272	R370	R278	R75
Tshwane Bus Services	R22	R29	R21	R20	R20	R0
Tshwane Economic Development Agency	R241	R458	R1	R0	R0	R0
Tshwane Leadership and Management Academy	R20	R9	R4	R0	R0	R0
Waste Management Services	R214	R105	R155	R280	R350	R0
Water and Sanitation	R895	R1 350	R2 208	R3 405	R3 081	R710
<b>Grand Total</b>	<b>R11 305</b>	<b>R10 243</b>	<b>R10 071</b>	<b>R9 099</b>	<b>R9 714</b>	<b>R1 709</b>

Departments	2026 / 2027	2027 / 2028	2028 / 2029	2029 / 2030	MTREF Total	Total
Agriculture & Rural Development	R0	R0	R0	R0	R94	R115
Airport Services	R0	R0	R0	R0	R107	R107
Communications and Marketing	R0	R0	R0	R0	R5	R5
Customer Relations Management	R0	R0	R0	R0	R71	R72
Economic Development and Spatial Planning	R7	R0	R0	R11	R551	R832
Electricity	R51	R46	R41	R0	R3 517	R5 548
Emergency Services	R516	R53	R10	R51	R322	R2 228
Environmental Management & Parks	R0	R0	R0	R0	R225	R339
Group Audit and Risk	R0	R0	R0	R0	R75	R126
Group Financial Services	R0	R0	R0	R0	R75	R105
Group Legal & Secretariat Services	R0	R0	R0	R0	R1	R1
Group Property Management	R0	R0	R0	R0	R145	R165

Departments	2026 / 2027	2027 / 2028	2028 / 2029	2029 / 2030	MTREF Total	Total
Health Services	R0	R0	R0	R0	R1 231	R1 925
Housing and Human Settlement	R0	R0	R0	R0	R4 986	R5 001
Housing Company Tshwane	R0	R0	R0	R0	R2 128	R2 128
ICT, Applications & Infrastructure	R0	R0	R0	R0	R1 028	R1 352
Integrated Rapid Public Transport Network (IRPTN)	R0	R0	R0	R0	R1 775	R2 180
Licensing	R0	R0	R0	R0	R19	R24
Metro Police Services	R92	R105	R98	R109	R2 071	R3 813
Office of the Chief Whip	R0	R0	R0	R0	R0	R0
Office of the City Manager	R0	R0	R0	R0	R33	R33
Office of the Executive Mayor	R0	R0	R0	R0	R9	R9
Office of the Speaker	R0	R0	R0	R0	R0	R0
Regional Operations & Coordination (ROC)	R0	R0	R0	R0	R181	R201
Roads and Stormwater	R25	R30	R25	R25	R6 134	R11 259
ROC - Community & Social Development Services	R0	R0	R0	R0	R0	R0
ROC - Environment & Agricultural Management	R0	R0	R0	R0	R19	R19
ROC - Health Services	R0	R0	R0	R0	R0	R0
ROC - Housing & Human Settlements	R0	R0	R0	R0	R0	R0
ROC - Roads & Transport	R0	R0	R0	R0	R0	R0
ROC - Utility Services	R0	R0	R0	R0	R11	R11
Shared Services	R0	R0	R0	R0	R350	R710
Social Development	R0	R0	R0	R0	R17	R97
Sports, Recreation & Infrastructure Development	R0	R0	R0	R0	R708	R1 431
Tshwane Bus Services	R0	R0	R0	R0	R73	R113
Tshwane Economic Development Agency	R0	R0	R0	R0	R699	R699
Tshwane Leadership and Management Academy	R0	R0	R0	R0	R32	R32
Waste Management Services	R0	R0	R0	R0	R475	R1 105
Water and Sanitation	R950	R250	R80	R67	R4 454	R12 997
<b>Grand Total</b>	<b>R1 641</b>	<b>R484</b>	<b>R254</b>	<b>R263</b>	<b>R31 619</b>	<b>R54 782</b>

From the table above, the following is of importance to note:

- The City's capital investment demand extends across the 10-year planning horizon.
- The total annual capital investment demand for the City decreases over the 10-year planning horizon. Capital investment demand is relatively stable at R10bn per annum for the first five years, where after it drops from 2025/26 to an average capital investment demand figure of around R1bn or less. This demonstrates that the City is moving towards

a truly long-term planning and budgeting approach, but that outer year planning and budgeting still needs to mature throughout the organisation.

- The total MTREF capital investment demand is approximately R31.6bn whereas the total 10-year capital investment demand is approximately R54.7bn.

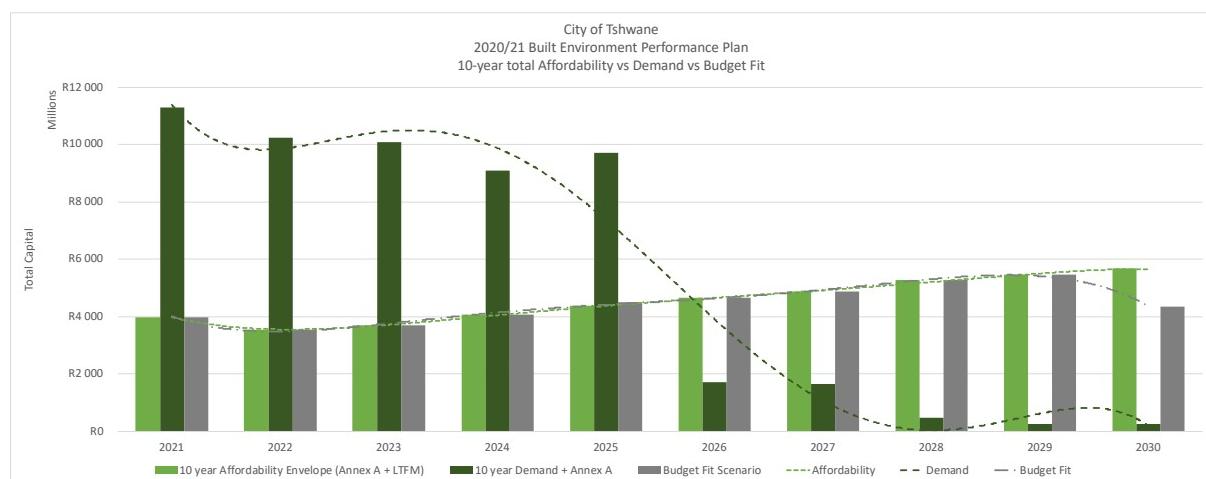
### 18.3.2 Funding Envelope

The affordability envelope, or otherwise stated, the funding envelope is the result of the Long-Term Financial Strategy (LTFS) prepared for the municipality. The aim of the Long-Term Financial Model (LTFM) is to define a set of parameters to which the municipality can roll out capital expenditure projects. The key parameter of interest for the budget fit process to continue is the total capital expenditure that is deemed as affordable per year.

The purpose of this section is therefore to take the results of the LTFM and to indicate what should be actively used to guide capital investment through the budget fit template – better defined as the total available capital expenditure per year or annual capex budget cap.

The total affordable capital expenditure for the 10-year planning period of the City amounts to R 45 billion, with a demand of R54.7 billion and a budget fit over the 10-year period at R44 billion, fitting to 97% of the total affordability over the 10-year planning horizon.

Figure 70 10-year Capital Budget based on Affordability vs Demand vs Budget Fit



Based on Figure 70, the following should be noted:

- The demand of the MTREF and the following 2 years saturates the affordability of the City with more than a double of the affordability envelope
- Due to the high demand in the first 5 years of the 10-year capital demand the amount of capital requests must be fitted into the following years
- The high demand causes a fit of capital budget into the outer years (2024 – 2026) saturating the high demand of the MTREF
- The trendline based on demand, suggests a large amount of backlog with a lack of future planning with the flattening of the demand in the outer years.

### 18.3.3 Budget fit statuses

Table 23 shows the capital budget's demand after the budget fit process has been applied. It shows that for the entire MTREF period, no budget was fitted or fitted with delay based on project scores. This indicates that the multi-year financial commitments of the 2020/21 draft capital budget (Annexure A) virtually depletes the entire funding envelope available for the MTREF period. Projects only start fitting to the budget envelope based on their priority score from 2023/24 onwards.

Table 23 10-year Budget Scenario Fit status (R'000)<sup>7</sup>

Year	Fitted	% Fitted	Fitted with delay	% Fitted with delay	Project Committed	% Project Committed
2020 / 2021	R0	0%	R0	0%	R3 982	22%
2021 / 2022	R0	0%	R0	0%	R3 554	20%
2022 / 2023	R0	0%	R0	0%	R3 701	20%
<b>MTREF Total</b>	<b>R0</b>	<b>0%</b>	<b>R0</b>	<b>0%</b>	<b>R11 237</b>	<b>62%</b>
2023 / 2024	R55	32%	R1 217	5%	R2 795	15%
2024 / 2025	R90	53%	R1 121	4%	R3 305	18%
2025 / 2026	R17	10%	R4 275	16%	R375	2%
2026 / 2027	R0	0%	R4 751	18%	R117	1%
2027 / 2028	R0	0%	R5 139	20%	R133	1%
2028 / 2029	R0	0%	R5 342	20%	R127	1%
2029 / 2030	R8	5%	R4 256	16%	R84	0%
<b>Total</b>	<b>R170</b>	<b>100%</b>	<b>R26 101</b>	<b>100%</b>	<b>R18 172</b>	<b>100%</b>

From the table above, the following is of importance to note:

- More or less 48% of capital demand (wish-list) had not been fitted over the MTREF period.
- The budget scenario development process fits projects successfully to the affordability envelope up to 2029/30, where after the capital project demand declines far below the modelled affordability envelope for the final year of the 10-year horizon.
- From the budget scenario result it is evident that there is spare capital funding capacity for the final year of the 10-year horizon (2029/30) amounting to R1.3bn.

---

<sup>7</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Figure 71 10-year Budget fit profile

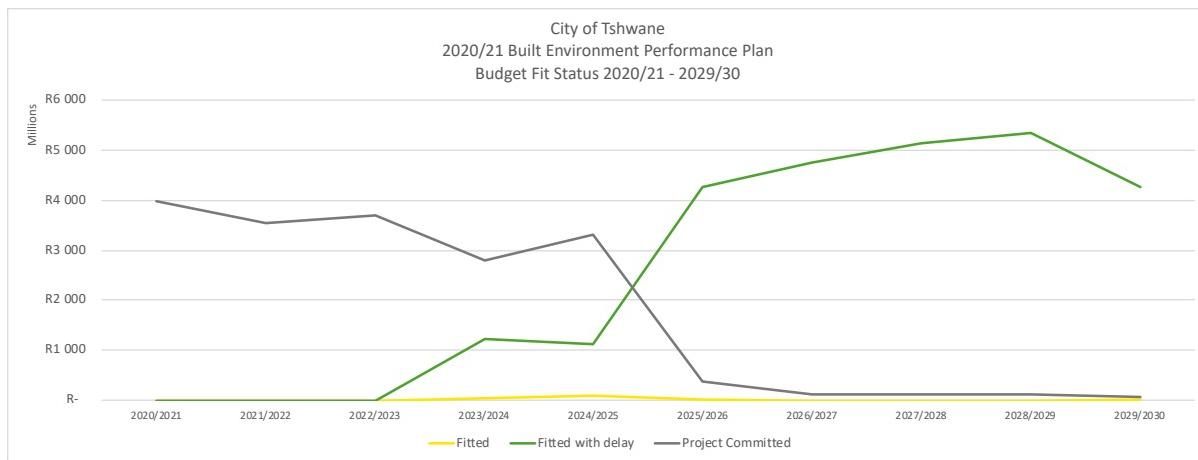


Figure 71 represents the budget fit profile over the 10-year planning horizon as per the budget fit strategy applied. It should be noted that some of the budget fit statuses listed below did not feature within the City's budget fit strategy due to limited funding envelope availability and the structure of the MTREF capital budget. However, each of the available budget fit statuses can be interpreted as follow:

- **Committed:** In the first year, projects that are currently under construction still has contractual commitments and cannot be fit at any other stage without having a negative impact on the City. These projects therefore are allocated budget in the first year, and not over the MTREF period. Only projects marked as committed and provisioned-in were fitted for the MTREF period.
- **Provisioned in:** These projects receive the most budget in the first years because they had already been declared as part of the MTREF. As time continues, these commitments decrease, and so does the capital requirement of these projects. In the case of Tshwane, only projects marked as committed and provisioned-in were fitted for the MTREF period.
- **Fitted:** During the MTREF period, no new capital demand is fitted. This is because of the finalisation of projects with a committed or provisioned-in status. Once these commitments had been served, the funding envelope opens up capacity to fit new projects. In the case of Tshwane, this only occurs after the third and outer year of the MTREF.
- **Fitted with delay:** During the MTREF period, no new capital demand is fitted with delay. This occurs because there is no capacity within the MTREF period, and a fitted with delay status can only be assigned to projects that are delayed. Fitted with delay budget availability gradually increases as the funding envelope opens up. In the case of Tshwane, this only occurs after the third and outer year of the MTREF.
- **No Fit:** Projects that do not fit are projects with the lowest score. It should be noted that a majority of projects were not fitted due to the limited funding envelope and the assigned committed/provisioned-in statuses. In the case of Tshwane, only projects marked as committed and provisioned-in were fitted for purposes of the MTREF period, which left very little room for budget fit in the outer year.
- **No Fit – Zero Budget:** Even though these projects do not currently have any capital demand, they have been conceptualised for capital demand in the near future. It is

---

therefore important to have sight of these projects on one single platform, together with the rest of the project pipeline.

Table 24 Budget Fit Statuses within the Budget Fit Scenario<sup>8</sup>

Budget Fit Statuses	Number of Projects	% of Total Projects
Fitted	12	1%
Fitted with delay	619	72%
Project Committed	231	27%
<b>Total number of projects within the budget fit Scenario</b>	<b>862</b>	<b>100%</b>

The Budget fit Scenario indicates that 72% of all projects are fitted with delay, i.e. not receiving budget within the requested financial year. Capital projects that are fitted with delay, highlighting the fact that planned capital expenditure requires future planning due to the demand being far more than the affordability envelope of the City.

### **18.3.4 Budget fit results**

The following section shows a summary for the 2020/21 MTREF based on the 10-year capital budget scenario results.

#### **18.3.4.1 Units**

The 10-year 2020/21 capital budget analysis by Tshwane Units, is shown in Figure 72 and Table 25 respectively.

---

<sup>8</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Figure 72 10-year 2020/21 Capital Budget per Unit (R'000)

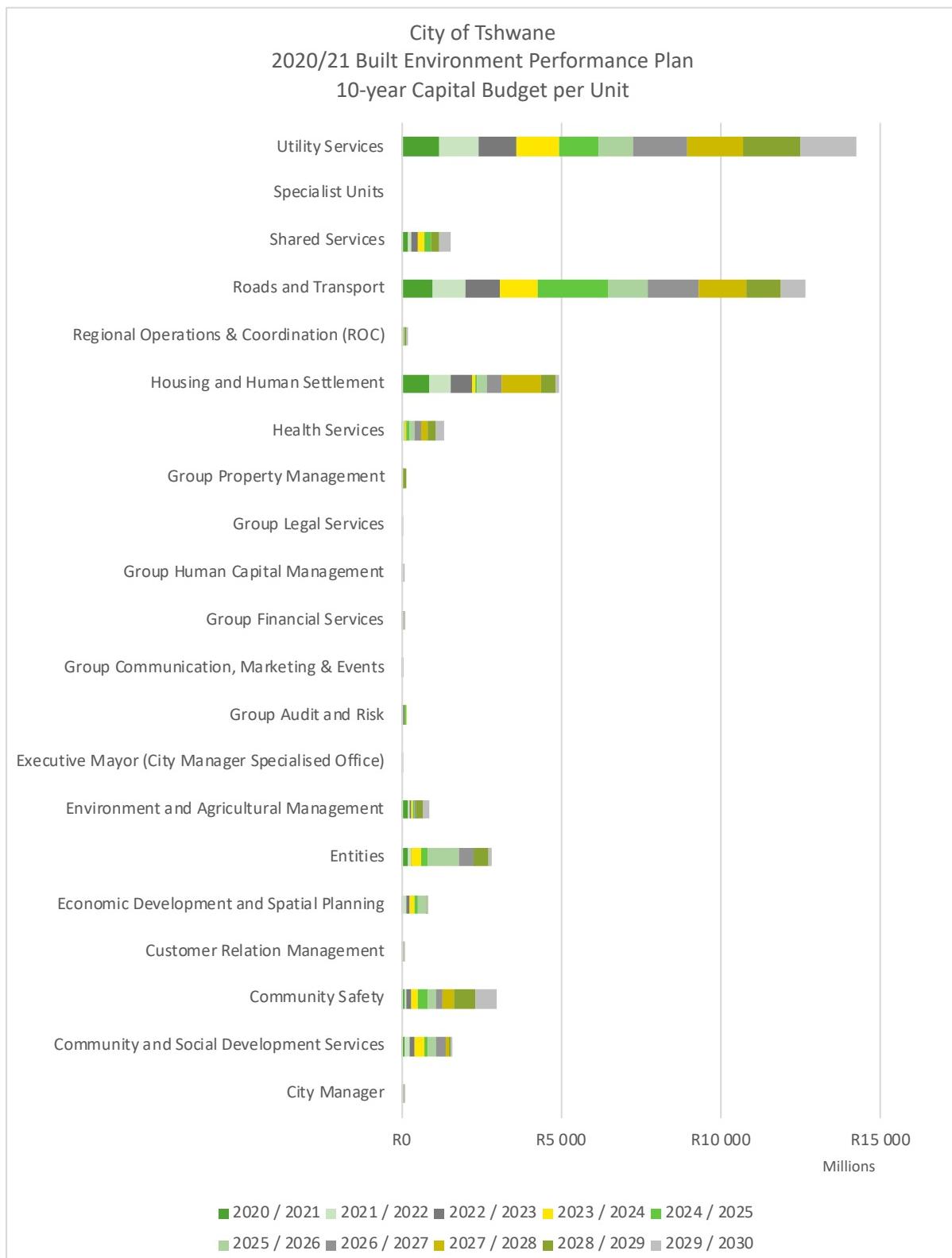


Table 25 10-year 2020/21 Capital Budget per Unit (R'000)<sup>9</sup>

Units	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
City Manager	R0	R0	R0	R0	R0	R23	R10
Community and Social Development Services	R79	R162	R180	R275	R130	R254	R283
Community Safety	R77	R80	R142	R237	R294	R257	R194
Customer Relation Management	R0	R4	R4	R0	R0	R4	R0
Economic Development and Spatial Planning	R65	R89	R107	R147	R87	R263	R0
Entities	R189	R101	R1	R316	R194	R1 018	R418
Environment and Agricultural Management	R193	R56	R56	R54	R60	R1	R21
Executive Mayor (City Manager Specialised Office)	R0						
Group Audit and Risk	R25	R25	R25	R25	R25	R0	R0
Group Communication, Marketing & Events	R4	R0	R0	R0	R0	R0	R0
Group Financial Services	R42	R1	R1	R0	R0	R0	R0
Group Human Capital Management	R0						
Group Legal Services	R0						
Group Property Management	R0	R10	R10	R14	R10	R11	R0
Health Services	R50	R43	R0	R63	R78	R160	R232
Housing and Human Settlement	R855	R702	R662	R110	R35	R306	R442
Regional Operations & Coordination (ROC)	R2	R8	R5	R39	R6	R18	R5
Roads and Transport	R988	R990	R1 111	R1 196	R2 190	R1 251	R1 570
Shared Services	R227	R77	R207	R213	R214	R0	R0
Specialist Units	R0						
Utility Services	R1 186	R1 206	R1 190	R1 377	R1 194	R1 102	R1 692
<b>Grand Total</b>	<b>R3 982</b>	<b>R3 554</b>	<b>R3 701</b>	<b>R4 066</b>	<b>R4 516</b>	<b>R4 667</b>	<b>R4 868</b>

Units	2027 / 2028	2028 / 2029	2029 / 2030	MTREF	Total	% of MTREF	% of Total
City Manager	R0	R0	R0	R0	R33	0,0%	0,1%
Community and Social Development Services	R120	R32	R13	R421	R1 528	3,7%	3,4%

<sup>9</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Units	2027 / 2028	2028 / 2029	2029 / 2030	MTREF	Total	% of MTREF	% of Total
Community Safety	R375	R665	R681	R299	R3 002	2,7%	6,8%
Customer Relation Management	R15	R32	R11	R7	R69	0,1%	0,2%
Economic Development and Spatial Planning	R0	R23	R8	R260	R789	2,3%	1,8%
Entities	R16	R480	R95	R292	R2 828	2,6%	6,4%
Environment and Agricultural Management	R29	R179	R214	R305	R861	2,7%	1,9%
Executive Mayor (City Manager Specialised Office)	R0	R3	R3	R0	R6	0,0%	0,0%
Group Audit and Risk	R0	R0	R0	R75	R126	0,7%	0,3%
Group Communication, Marketing & Events	R0	R0	R0	R5	R5	0,0%	0,0%
Group Financial Services	R0	R16	R16	R43	R75	0,4%	0,2%
Group Human Capital Management	R0	R27	R3	R0	R30	0,0%	0,1%
Group Legal Services	R0	R0	R0	R0	R1	0,0%	0,0%
Group Property Management	R0	R110	R0	R20	R165	0,2%	0,4%
Health Services	R167	R275	R285	R94	R1 354	0,8%	3,0%
Housing and Human Settlement	R1 276	R448	R95	R2 219	R4 931	19,8%	11,1%
Regional Operations & Coordination (ROC)	R0	R68	R55	R15	R206	0,1%	0,5%
Roads and Transport	R1 529	R1 071	R752	R3 089	R12 647	27,5%	28,5%
Shared Services	R0	R251	R344	R511	R1 532	4,5%	3,4%
Specialist Units	R0	R0	R0	R0	R0	0,0%	0,0%
Utility Services	R1 745	R1 790	R1 774	R3 581	R14 256	31,9%	32,1%
<b>Grand Total</b>	<b>R5 272</b>	<b>R5 470</b>	<b>R4 348</b>	<b>R11 237</b>	<b>R44 443</b>	<b>100,0%</b>	<b>100,0%</b>

From the table above, the following is of importance to note:

- A large portion of the capital budget is allocated to several key infrastructure departments with a focus on creating infrastructure, at a total of 71.6% of the total budget.
- Utility Services has the largest portion of capital allocated, comprising of Electricity and Water and Sanitation accounting for 32% of the total capital budget over the 10-year planning horizon.
- Roads and Transport (comprising of Airports, Public Transport, and Roads and Stormwater), has a total budget of R12.6bn, allocated in the total 10-year capital budget, making it the second largest unit at 28.5% of the total budget. With Housing and Human Settlement as the third biggest contributor to the total capital budget with 11%.

- 
- Utility services and Roads and Transport dominate the 2020/21 MTREF budget allocations with 32% (R3,5bn) and 27,5% (R3bn) respectively, followed by Housing and Human Settlement at 19.8% (R2,2bn).
  - National Treasury places emphasis on the integration and collaborative planning which should occur between Housing and Human Settlements and Roads and Transport, particularly within integration zones. The need for this collaborative and integrated planning is demonstrated by the fact that these two departments collectively consume 47.2% (R5,3bn) of the 2020/21 MTREF capital budget.
  - The current 2020/21 MTREF analysis indicates the Top 3 units as Utility Services, Roads and Transport and Housing and Human Settlements accounting for 79% of the total 2020/21 MTREF. The budget allocation within the MTREF indicates that the main focus of the budget is within infrastructure.

The departments with the largest capital budgets are infrastructure related departments. The integration and collaboration of infrastructure services investments within the same spatial area is a requirement from National Treasury. Infrastructure investments within the City ensures a better basic service delivery and an increase rates base in future. The City's intent on providing basic services are evident in the total amount of capital budget allocation towards infrastructure services.

#### **18.3.4.2 Departments**

The 10-year 2020/21 capital budget analysis by Tshwane Departments, is shown in Figure 73 and Table 26 respectively.

Figure 73 10-year 2020/21 Capital Budget per Department (R'000)

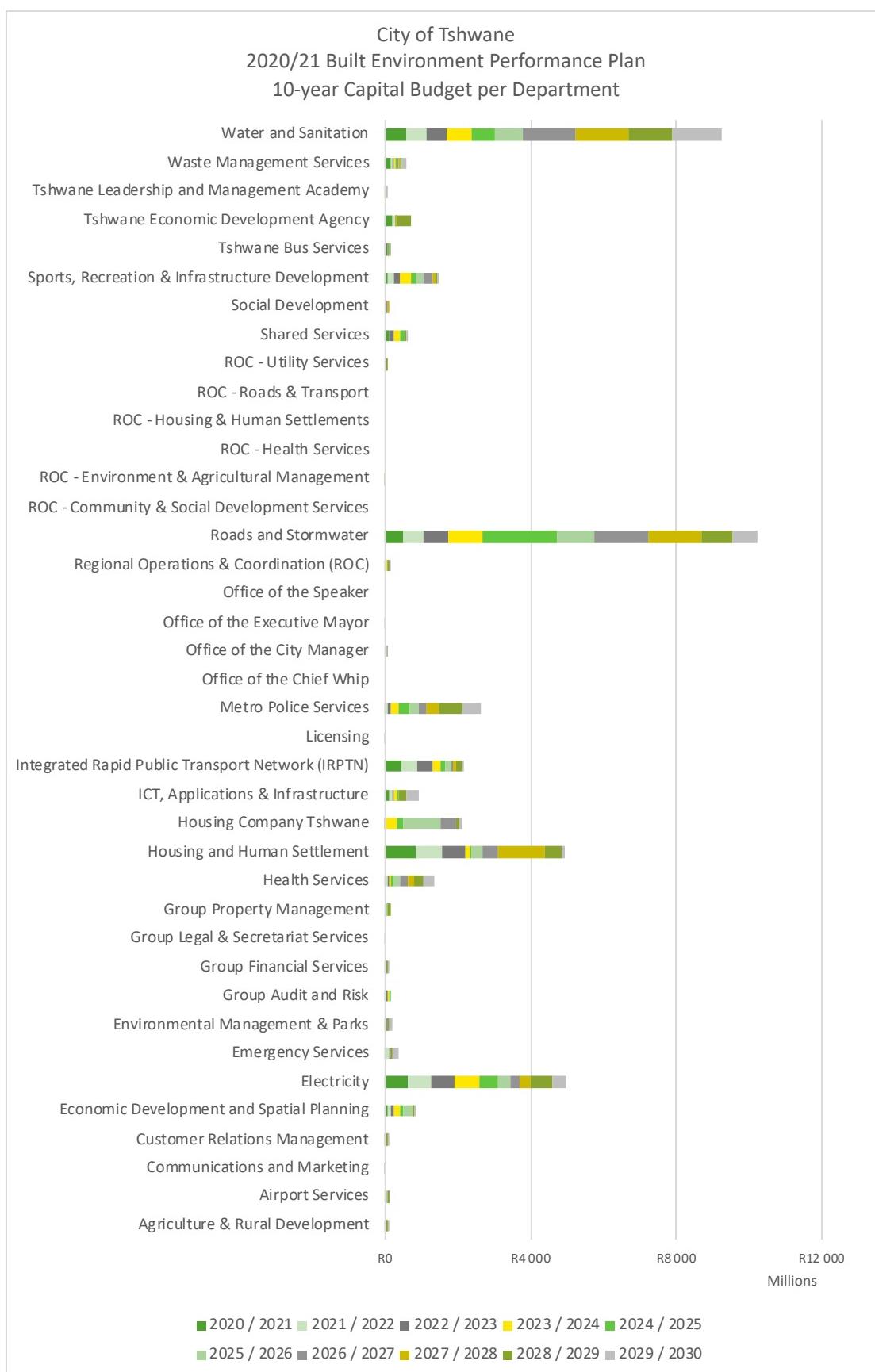


Table 26 10-year 2020/21 Capital Budget Department (R'000)<sup>10</sup>

Department	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
Agriculture & Rural Development	R5	R7	R7	R2	R1	R0	R1
Airport Services	R0	R0	R0	R0	R0	R57	R35
Communications and Marketing	R4	R0	R0	R0	R0	R0	R0
Customer Relations Management	R0	R4	R4	R0	R0	R4	R0
Economic Development and Spatial Planning	R65	R89	R107	R147	R87	R263	R0
Electricity	R617	R637	R646	R674	R542	R333	R254
Emergency Services	R47	R50	R50	R6	R1	R1	R1
Environmental Management & Parks	R16	R9	R9	R7	R9	R1	R1
Group Audit and Risk	R25	R25	R25	R25	R25	R0	R0
Group Financial Services	R42	R1	R1	R0	R0	R0	R0
Group Legal & Secretariat Services	R0						
Group Property Management	R0	R10	R10	R14	R10	R11	R0
Health Services	R50	R43	R0	R63	R78	R160	R232
Housing and Human Settlement	R855	R702	R662	R110	R35	R306	R442
Housing Company Tshwane	R1	R1	R1	R316	R194	R1 018	R416
ICT, Applications & Infrastructure	R117	R77	R57	R63	R64	R0	R0
Integrated Rapid Public Transport Network (IRPTN)	R455	R419	R438	R224	R105	R162	R65
Licensing	R0	R0	R0	R0	R0	R2	R0
Metro Police Services	R30	R30	R92	R231	R293	R257	R194
Office of the Chief Whip	R0						

<sup>10</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Department	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
Office of the City Manager	R0	R0	R0	R0	R0	R23	R10
Office of the Executive Mayor	R0						
Office of the Speaker	R0						
Regional Operations & Coordination (ROC)	R2	R8	R5	R39	R6	R7	R2
Roads and Stormwater	R513	R551	R654	R952	R2 065	R1 030	R1 470
ROC - Community & Social Development Services	R0						
ROC - Environment & Agricultural Management	R0	R0	R0	R0	R0	R1	R3
ROC - Health Services	R0						
ROC - Housing & Human Settlements	R0						
ROC - Roads & Transport	R0						
ROC - Utility Services	R0	R0	R0	R0	R0	R11	R0
Shared Services	R110	R0	R150	R150	R150	R0	R0
Social Development	R0	R0	R0	R0	R0	R17	R40
Sports, Recreation & Infrastructure Development	R79	R162	R180	R275	R130	R237	R243
Tshwane Bus Services	R20	R20	R20	R20	R20	R0	R0
Tshwane Economic Development Agency	R189	R101	R1	R0	R0	R0	R2
Tshwane Leadership and Management Academy	R0						
Waste Management Services	R172	R40	R40	R45	R50	R0	R20
Water and Sanitation	R568	R569	R544	R703	R652	R769	R1 439

Department	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
<b>Grand Total</b>	<b>R3 982</b>	<b>R3 554</b>	<b>R3 701</b>	<b>R4 066</b>	<b>R4 516</b>	<b>R4 667</b>	<b>R4 868</b>

Department	2027 / 2028	2028 / 2029	2029 / 2030	MTREF	Total	MTREF %	% of Total
Agriculture & Rural Development	R4	R33	R24	R18	R81	0,2%	0,2%
Airport Services	R0	R15	R0	R0	R107	0,0%	0,2%
Communications and Marketing	R0	R0	R0	R5	R5	0,0%	0,0%
Customer Relations Management	R15	R32	R11	R7	R69	0,1%	0,2%
Economic Development and Spatial Planning	R0	R23	R8	R260	R789	2,3%	1,8%
Electricity	R317	R592	R385	R1 900	R4 996	16,9%	11,2%
Emergency Services	R1	R62	R150	R147	R368	1,3%	0,8%
Environmental Management & Parks	R0	R69	R75	R34	R196	0,3%	0,4%
Group Audit and Risk	R0	R0	R0	R75	R126	0,7%	0,3%
Group Financial Services	R0	R16	R16	R43	R75	0,4%	0,2%
Group Legal & Secretariat Services	R0	R0	R0	R0	R1	0,0%	0,0%
Group Property Management	R0	R110	R0	R20	R165	0,2%	0,4%
Health Services	R167	R275	R285	R94	R1 354	0,8%	3,0%
Housing and Human Settlement	R1 276	R448	R95	R2 219	R4 931	19,8%	11,1%
Housing Company Tshwane	R0	R88	R95	R2	R2 128	0,0%	4,8%
ICT, Applications & Infrastructure	R0	R221	R313	R251	R912	2,2%	2,1%
Integrated Rapid Public Transport Network (IRPTN)	R65	R192	R35	R1 312	R2 160	11,7%	4,9%
Licensing	R0	R5	R12	R0	R19	0,0%	0,0%
Metro Police Services	R375	R603	R530	R152	R2 635	1,4%	5,9%

Department	2027 / 2028	2028 / 2029	2029 / 2030	MTREF	Total	MTREF %	% of Total
Office of the Chief Whip	R0	R0	R0	R0	R0	0,0%	0,0%
Office of the City Manager	R0	R0	R0	R0	R33	0,0%	0,1%
Office of the Executive Mayor	R0	R3	R3	R0	R6	0,0%	0,0%
Office of the Speaker	R0	R0	R0	R0	R0	0,0%	0,0%
Regional Operations & Coordination (ROC)	R0	R52	R55	R15	R176	0,1%	0,4%
Roads and Stormwater	R1 464	R849	R702	R1 718	R10 249	15,3%	23,1%
ROC - Community & Social Development Services	R0	R0	R0	R0	R0	0,0%	0,0%
ROC - Environment & Agricultural Management	R0	R15	R0	R0	R19	0,0%	0,0%
ROC - Health Services	R0	R0	R0	R0	R0	0,0%	0,0%
ROC - Housing & Human Settlements	R0	R0	R0	R0	R0	0,0%	0,0%
ROC - Roads & Transport	R0	R0	R0	R0	R0	0,0%	0,0%
ROC - Utility Services	R0	R1	R0	R0	R11	0,0%	0,0%
Shared Services	R0	R30	R30	R260	R620	2,3%	1,4%
Social Development	R40	R0	R0	R0	R97	0,0%	0,2%
Sports, Recreation & Infrastructure Development	R80	R32	R13	R421	R1 431	3,7%	3,2%
Tshwane Bus Services	R0	R10	R3	R60	R113	0,5%	0,3%
Tshwane Economic Development Agency	R16	R391	R0	R290	R699	2,6%	1,6%
Tshwane Leadership and Management Academy	R0	R27	R3	R0	R30	0,0%	0,1%

Department	2027 / 2028	2028 / 2029	2029 / 2030	MTREF	Total	MTREF %	% of Total
Waste Management Services	R25	R77	R115	R253	R585	2,2%	1,3%
Water and Sanitation	R1 429	R1 198	R1 389	R1 682	R9 260	15,0%	20,8%
<b>Grand Total</b>	<b>R5 272</b>	<b>R5 470</b>	<b>R4 348</b>	<b>R11 237</b>	<b>R44 443</b>	<b>100,0%</b>	<b>100,0%</b>

From the table above, the following is of importance to note:

- Within the total 10-year capital budget, three of the 39 departments have been allocated the highest percentage of the budget (55%) namely Water and Sanitation, Roads and Stormwater and Electricity.
- Key infrastructure departments have been allocated the majority of the MTREF capital budget (78.6%). Key infrastructure departments include Electricity (16.9%), Housing and Human Settlement (19.8%), Roads and Stormwater (15.3%), Water and Sanitation (15%) and Integrated Rapid Public Transport Network (IRPTN) (11.7%).
- The flattening out of capital budget in the outer year of the 10-year horizon, highlights a concern towards future planning of the City's capital planning process.

## 19 Resourcing the Metro's Project Pipeline (Spatial Budget Mix)

Section B of this document outlined the identification of spatially transformation areas, based on the city's MSDF and Integration Zones. Given that the GSDF 2030 identifies the importance of existing spatially targeted areas on a municipal level, the areas of focus suggest a strong alignment and inclusion of the nodes and corridors outlined in the MSDF together with the resultant CLDPs.

The following section will take all the spatial transformation areas and analyse the current 10-year capital budget with these areas. Additionally, the need to understand the capital budget based on the administrative boundaries to strengthen the ability to report capital investments by Region and Ward. The IDP requires the capital budget to be expressed based on Regions and Wards. The alignment of the capital budget to the IDP is necessary from an administrative perspective, regarding reporting and administration of the City.

The total 2020/21 MTREF Capital Budget analysis indicates that R2,6 billion (24%) of the MTREF budget is allocated to non-spatially targeted capital projects. Non-spatial capital projects are projects classified according to MSCOA as City Wide or Administrative HQ<sup>11</sup>. The 2020/21 MTREF comprises of 231 projects, of which 76% is spatially mapped and the total 10-year Capital Budget has an additional 631 projects.

The total 10-year Capital Budget analysis indicates that R9.4 billion (21%) of the total budget is allocated to projects classified as City Wide or Administrative HQ. The spatial analysis of the capital

---

<sup>11</sup> Administrative HQ includes projects which have not been mapped spatially or projects which have invalidly been mapped outside of the City of Tshwane administrative boundary.

budget included below will refer to the spatial and non-spatial location of capital budgets by quoting MSCOA City Wide or Administrative HQ classifications.

## 19.1 Total Budget per Spatial Transformation Evaluation Criteria

### 19.1.1 Region

The regional capital analysis was undertaken by means of the Tshwane Capital Planning system (CaPS), which allows for spatial referencing and spatial querying of capital projects. Figure 74 and Table 27 shows the 2020/21 10-year Capital Budget per region.

Figure 74 10-year Capital Budget Per Region<sup>12</sup>

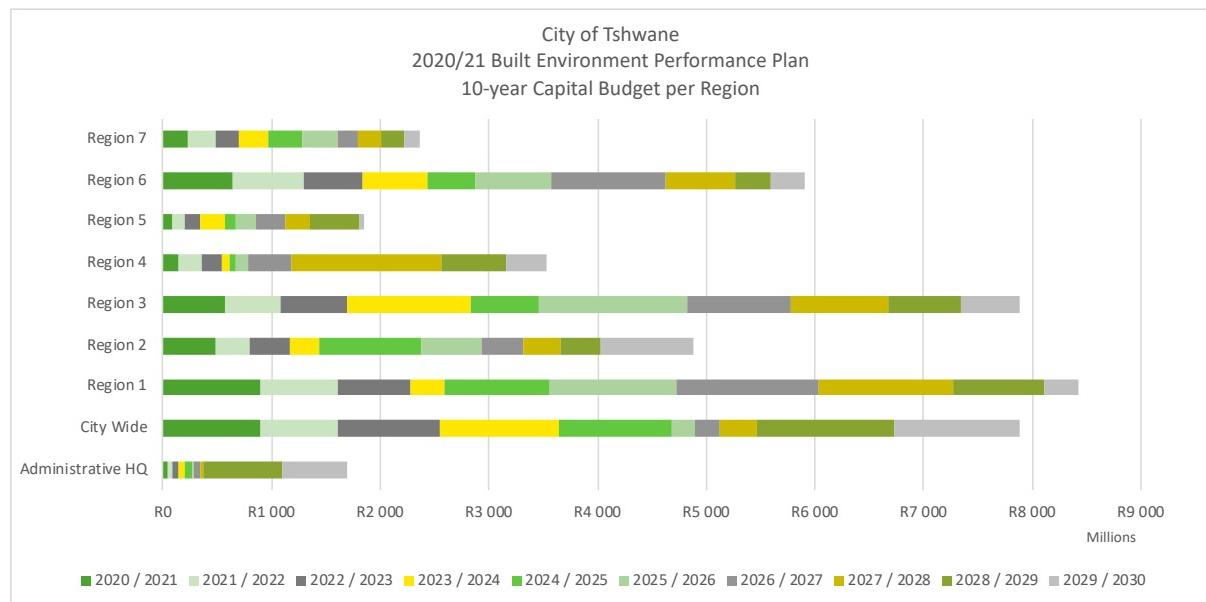


Table 27 2020/21 MTREF Capital Budget Regional Analysis (R'000)<sup>13</sup>

Regions	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
Administrative HQ	R37	R50	R58	R57	R63	R14	R68
City Wide	R891	R724	R936	R1 088	R1 041	R212	R227
Region 1	R903	R710	R662	R317	R959	R1 177	R1 311
Region 2	R479	R323	R360	R277	R934	R563	R387
Region 3	R569	R516	R605	R1 136	R640	R1 359	R956
Region 4	R150	R207	R186	R76	R46	R122	R396
Region 5	R91	R104	R142	R239	R89	R187	R276
Region 6	R636	R661	R536	R603	R436	R705	R1 056

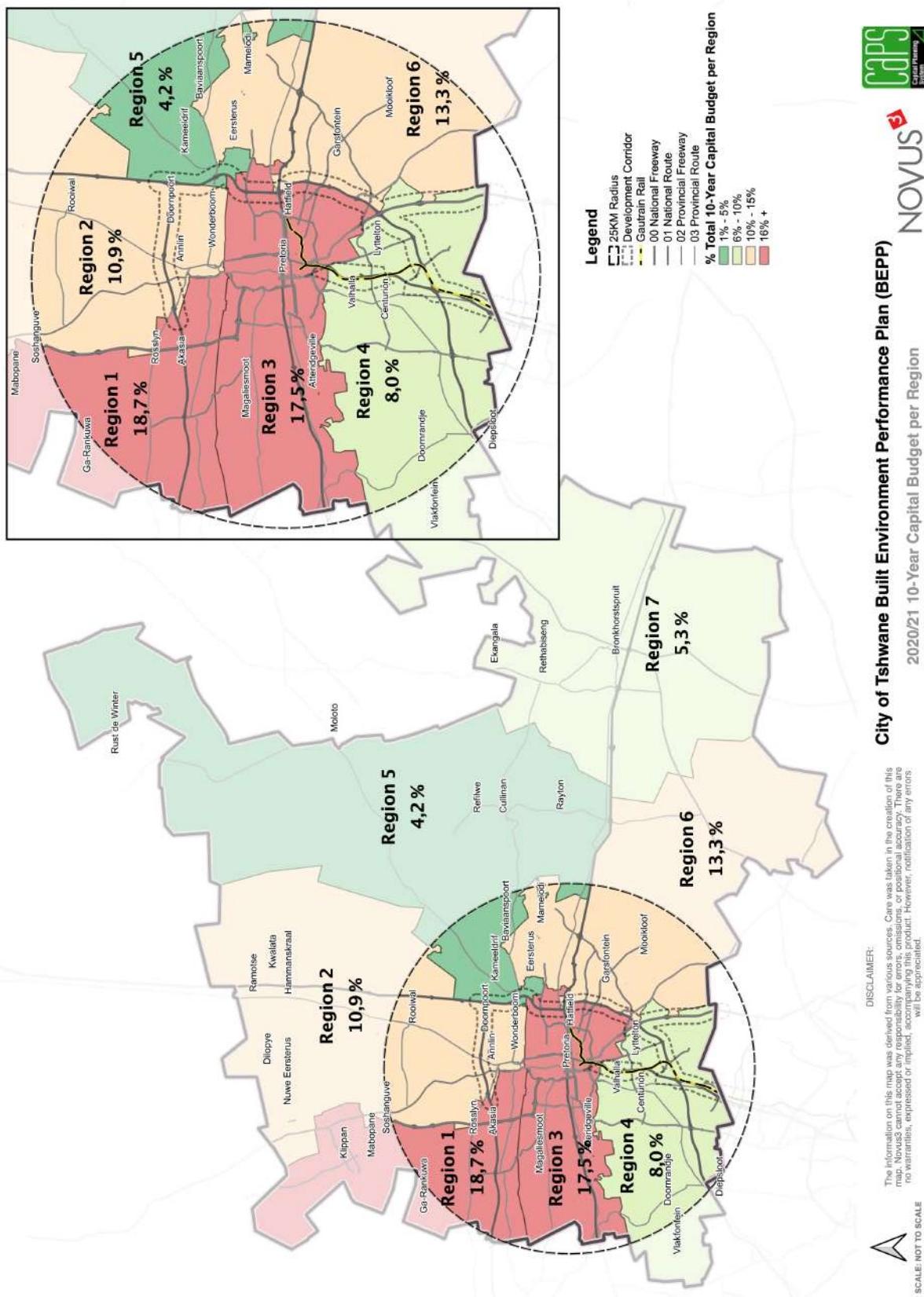
<sup>12</sup> Administrative HQ includes projects which have not been mapped spatially or projects which have invalidly been mapped outside of the City of Tshwane administrative boundary.

<sup>13</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Regions	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
Region 7	R226	R260	R215	R274	R308	R327	R190
<b>Grand Total</b>	<b>R3 982</b>	<b>R3 554</b>	<b>R3 701</b>	<b>R4 066</b>	<b>R4 516</b>	<b>R4 667</b>	<b>R4 868</b>

Regions	2027 / 2028	2028 / 2029	2029 / 2030	MTREF Total	Total	% MTREF	% Total
Administrative HQ	R28	R728	R590	R145	R1 693	1,3%	3,8%
City Wide	R343	R1 275	R1 149	R2 551	R7 884	22,7%	17,7%
Region 1	R1 226	R842	R316	R2 276	R8 424	20,3%	19,0%
Region 2	R332	R368	R866	R1 162	R4 889	10,3%	11,0%
Region 3	R889	R669	R548	R1 690	R7 887	15,0%	17,7%
Region 4	R1 377	R599	R375	R543	R3 534	4,8%	8,0%
Region 5	R227	R456	R44	R338	R1 856	3,0%	4,2%
Region 6	R641	R318	R322	R1 833	R5 913	16,3%	13,3%
Region 7	R210	R217	R138	R701	R2 364	6,2%	5,3%
<b>Grand Total</b>	<b>R5 272</b>	<b>R5 470</b>	<b>R4 348</b>	<b>R11 237</b>	<b>R44 443</b>	<b>100,0%</b>	<b>100,0%</b>

Figure 75 Spatial 2020/21 10-year Capital Budget per Region



From the table above, the following is of importance to note:

- 
- A large portion of the 2020/21 MTREF capital budget (24% or R2.6bn) and 10-year 2020/21 capital budget (21.5% or R9.5bn) is non-spatially targeted (i.e. City-wide or Administrative Headquarters)
  - Region 1, 2, 3 and 6 receive the largest portion of the capital budget, accounting for 62% of the total 2020/21 MTREF capital budget. Region 1 has been allocated the highest portion of the total 2020/21 MTREF capital budget at 20%, followed by Region 6 at 16% and Region 3 at 15%.

The IDP indicated that Regions 6, 3, 1 and 4 have a high number of residents without any electricity. The spatial targeted budget within these regions aligns with the identified areas to promote infrastructure investments by addressing the electricity for all infrastructure drive. Additionally, region 1 and region 6 were previously marginalised areas, and the boost of investments within these regions will provide these regions with better services, strengthening the City's vision to address pro-poor areas. Region 1 includes Rosslyn which has been identified as one of the City's priority investment areas in order to promote industrial development.

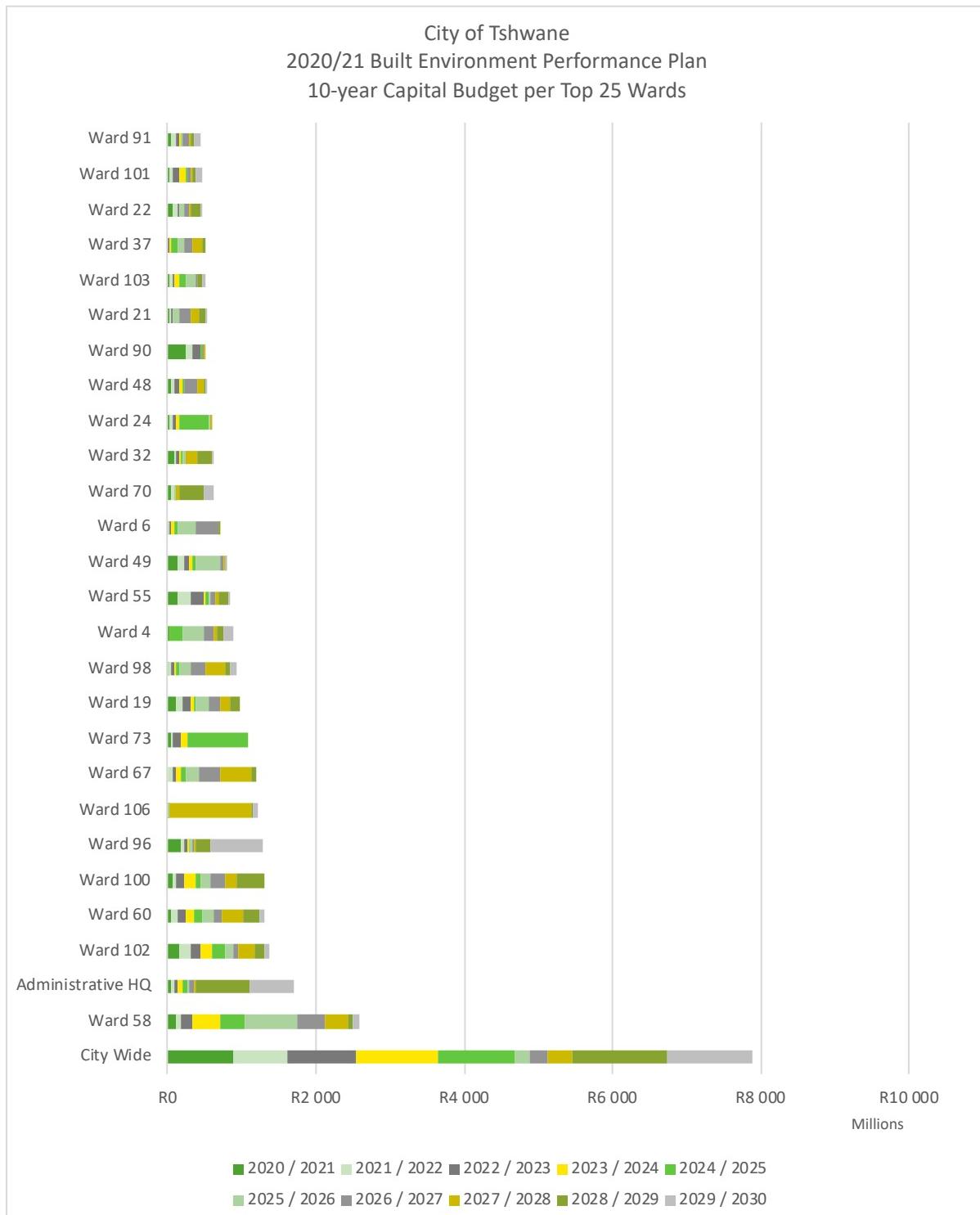
### **19.1.2 Top 25 Wards**

The 2020/21 MTREF capital budget analysis shows that Ward 55 receives the highest capital budget allocation (4%) in terms of the total MTREF (refer to Table 28). The top 5 wards which received the highest capital budget allocation in terms of the total MTREF includes Wards 55, 102, 90, 58 and 19, amounting to approximately R2bn or 18%.

Within the total 10-year 2020/21 capital budget the analysis shows that Ward 58 receives R1.3bn (6%) of the total 10-year 2020/21 capital budget. The ward-based capital expenditure analysis is an administrative view on the capital budget more than a spatially targeted lens, as ward demarcation is based on population per square kilometre.

The top 25 wards accounts for 49% of the total 10-year 2020/21 capital budget with the top 5 wards receiving 17% of the total capital budget.

Figure 76 10-year Capital Budget per Top 25 Wards Analysis<sup>14</sup>



<sup>14</sup> Administrative HQ includes projects which have not been mapped spatially or projects which have invalidly been mapped outside of the City of Tshwane administrative boundary.

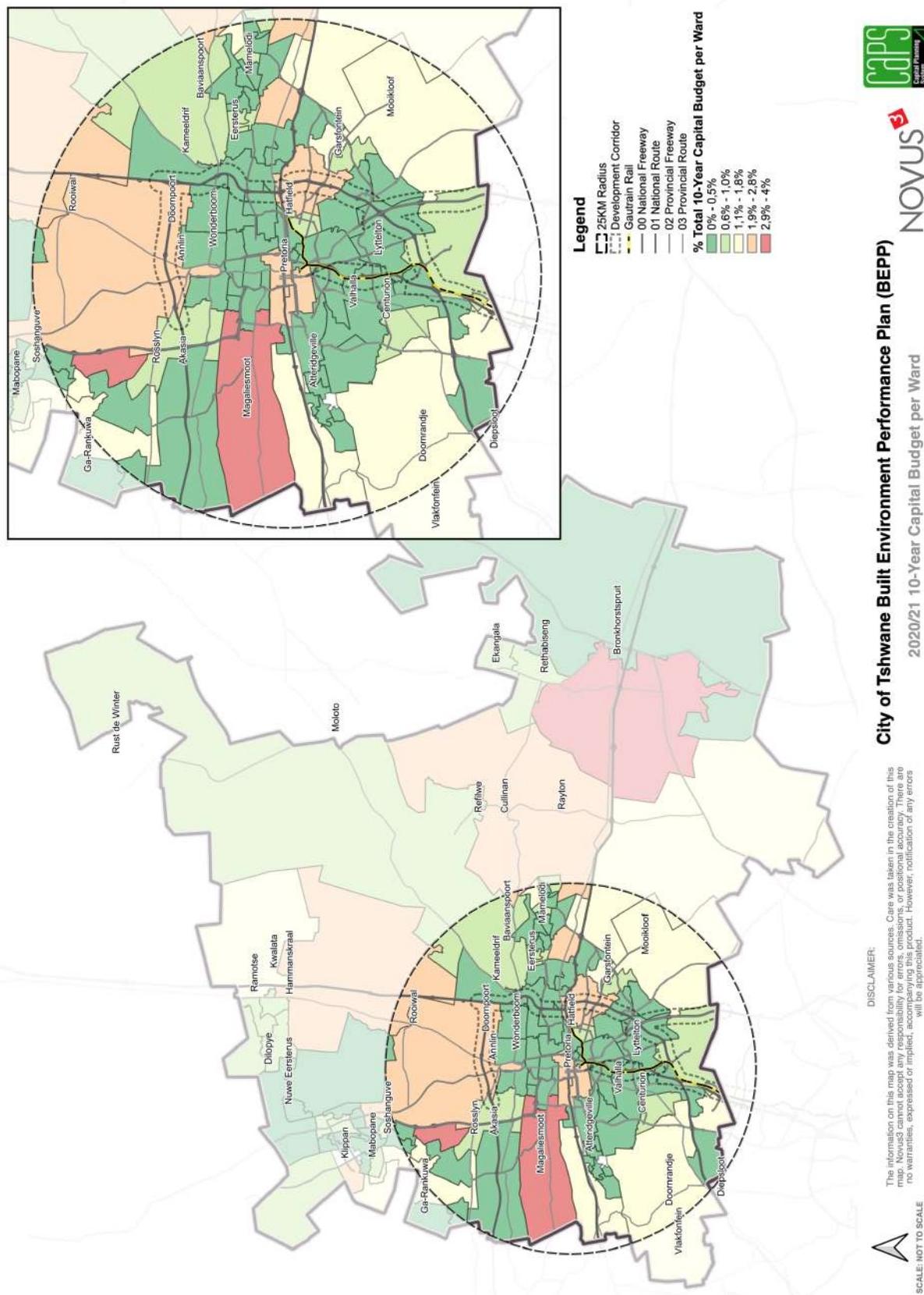
Table 28 10-year Capital Budget per Top 25 Ward Analysis (R'000) sorted by 10-year budget<sup>15</sup>

Wards	2020 / 2021	2021 / 2022	2022 / 2023	2023 / 2024	2024 / 2025	2025 / 2026	2026 / 2027
City Wide	R891	R724	R936	R1 088	R1 041	R212	R227
Ward 58	R112	R72	R139	R382	R336	R699	R388
Administrative HQ	R37	R50	R58	R57	R63	R14	R68
Ward 102	R146	R158	R148	R143	R183	R100	R75
Ward 60	R50	R84	R108	R114	R119	R135	R125
Ward 100	R57	R61	R100	R160	R60	R139	R189
Ward 96	R175	R44	R56	R5	R19	R32	R16
Ward 106	R2	R2	R2	R2	R2	R15	R0
Ward 67	R0	R60	R60	R60	R60	R185	R294
Ward 73	R35	R42	R92	R103	R803	R0	R0
Ward 19	R108	R100	R110	R30	R30	R173	R161
Ward 98	R10	R42	R44	R17	R53	R140	R196
Ward 4	R20	R0	R0	R11	R167	R290	R133
Ward 55	R135	R178	R168	R30	R33	R25	R65
Ward 49	R129	R86	R67	R58	R26	R350	R41
Ward 6	R5	R10	R20	R50	R53	R232	R313
Ward 70	R38	R46	R10	R7	R0	R13	R7
Ward 32	R87	R30	R30	R31	R32	R24	R11
Ward 24	R25	R45	R44	R50	R400	R3	R4
Ward 48	R35	R54	R65	R47	R12	R0	R188
Ward 90	R243	R97	R97	R16	R12	R4	R19
Ward 21	R23	R20	R20	R0	R0	R100	R137
Ward 103	R34	R29	R20	R77	R87	R127	R35
Ward 37	R4	R6	R6	R24	R93	R87	R117
Ward 22	R60	R68	R25	R0	R0	R60	R77
Ward 101	R20	R57	R87	R75	R27	R4	R35
Ward 91	R52	R51	R51	R16	R1	R25	R90
<b>Total</b>	<b>R2 531</b>	<b>R2 216</b>	<b>R2 563</b>	<b>R2 651</b>	<b>R3 710</b>	<b>R3 187</b>	<b>R3 009</b>
<b>Grand Total</b>	<b>R3 982</b>	<b>R3 554</b>	<b>R3 701</b>	<b>R4 066</b>	<b>R4 516</b>	<b>R4 667</b>	<b>R4 868</b>
<b>% Top 25 Wards Capital Budget</b>	<b>64%</b>	<b>62%</b>	<b>69%</b>	<b>65%</b>	<b>82%</b>	<b>68%</b>	<b>62%</b>

<sup>15</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Wards	2027 / 2028	2028 / 2029	2029 / 2030	MTREF Total	Total	MTREF %	Total %
City Wide	R343	R1 275	R1 149	R2 551	R7 884	23%	17%
Ward 58	R295	R81	R77	R322	R2 579	3%	6%
Administrative HQ	R28	R728	R590	R145	R1 693	1%	4%
Ward 102	R210	R139	R69	R452	R1 370	4%	3%
Ward 60	R284	R219	R75	R242	R1 313	2%	3%
Ward 100	R155	R380	R0	R218	R1 301	2%	3%
Ward 96	R20	R219	R706	R275	R1 291	2%	3%
Ward 106	R1 103	R30	R50	R5	R1 207	0%	3%
Ward 67	R419	R50	R0	R120	R1 188	1%	3%
Ward 73	R0	R0	R0	R169	R1 075	2%	2%
Ward 19	R124	R135	R0	R318	R970	3%	2%
Ward 98	R284	R48	R88	R96	R921	1%	2%
Ward 4	R34	R108	R125	R20	R887	0%	2%
Ward 55	R54	R136	R20	R482	R844	4%	2%
Ward 49	R12	R6	R6	R283	R783	3%	2%
Ward 6	R1	R0	R0	R35	R684	0%	2%
Ward 70	R43	R315	R150	R94	R629	1%	1%
Ward 32	R151	R195	R0	R147	R591	1%	1%
Ward 24	R4	R0	R0	R114	R575	1%	1%
Ward 48	R84	R20	R29	R154	R534	1%	1%
Ward 90	R30	R0	R0	R437	R518	4%	1%
Ward 21	R115	R91	R10	R63	R515	1%	1%
Ward 103	R0	R50	R47	R83	R506	1%	1%
Ward 37	R133	R30	R0	R15	R499	0%	1%
Ward 22	R30	R127	R25	R153	R471	1%	1%
Ward 101	R20	R56	R88	R164	R468	1%	1%
Ward 91	R35	R33	R95	R153	R447	1%	1%
<b>Total</b>	<b>R4 009</b>	<b>R4 468</b>	<b>R3 399</b>	<b>R7 310</b>	<b>R31 744</b>	<b>65%</b>	<b>70%</b>
<b>Grand Total</b>	<b>R5 272</b>	<b>R5 470</b>	<b>R4 348</b>	<b>R11 237</b>	<b>R44 443</b>	<b>100%</b>	<b>100%</b>
% Top 25 Wards Capital Budget	76%	82%	78%	65%	71%	65%	70%

Figure 77 Spatial 2020/21 10-year Capital Budget per Ward



### 19.1.3 MSDF Targeting

#### 19.1.3.1 City of Tshwane 2020/21 10-year Capital Budget Spatial Targeting by MSDF Element

The 10-year and MTREF 2020/21 capital budget spatial targeting analysis by MSDF spatial structuring elements, is shown in Figure 78 and Table 29 respectively.

Figure 78 10-year Capital Budget per MSDF<sup>16</sup>

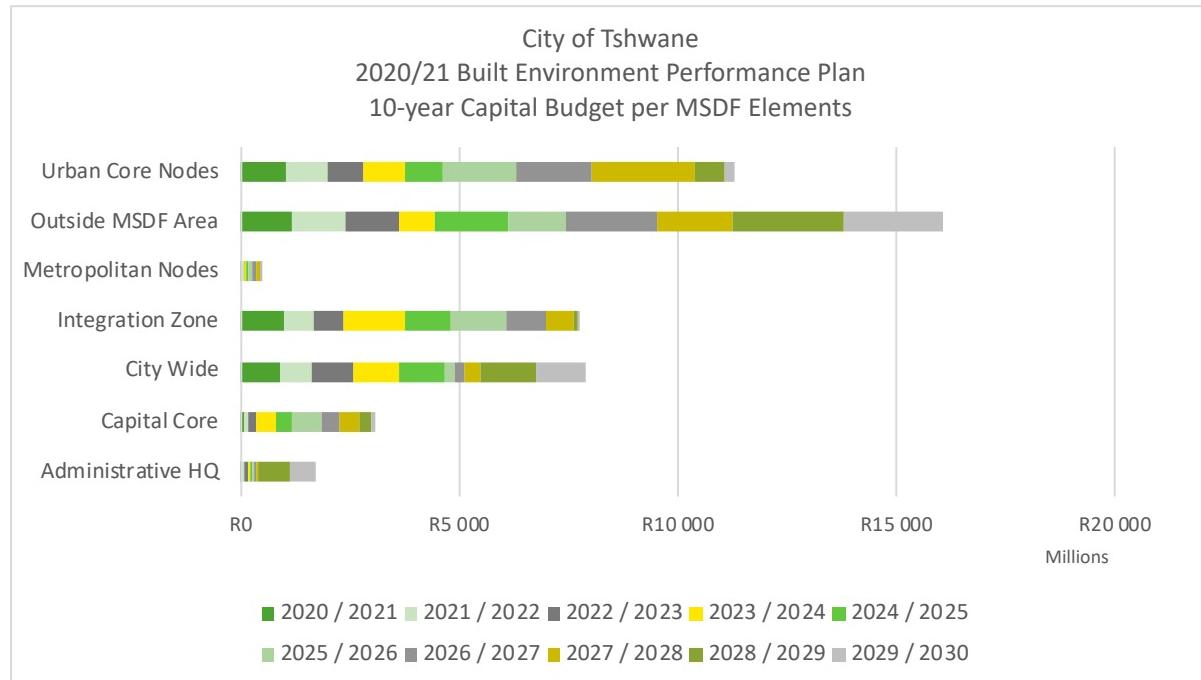


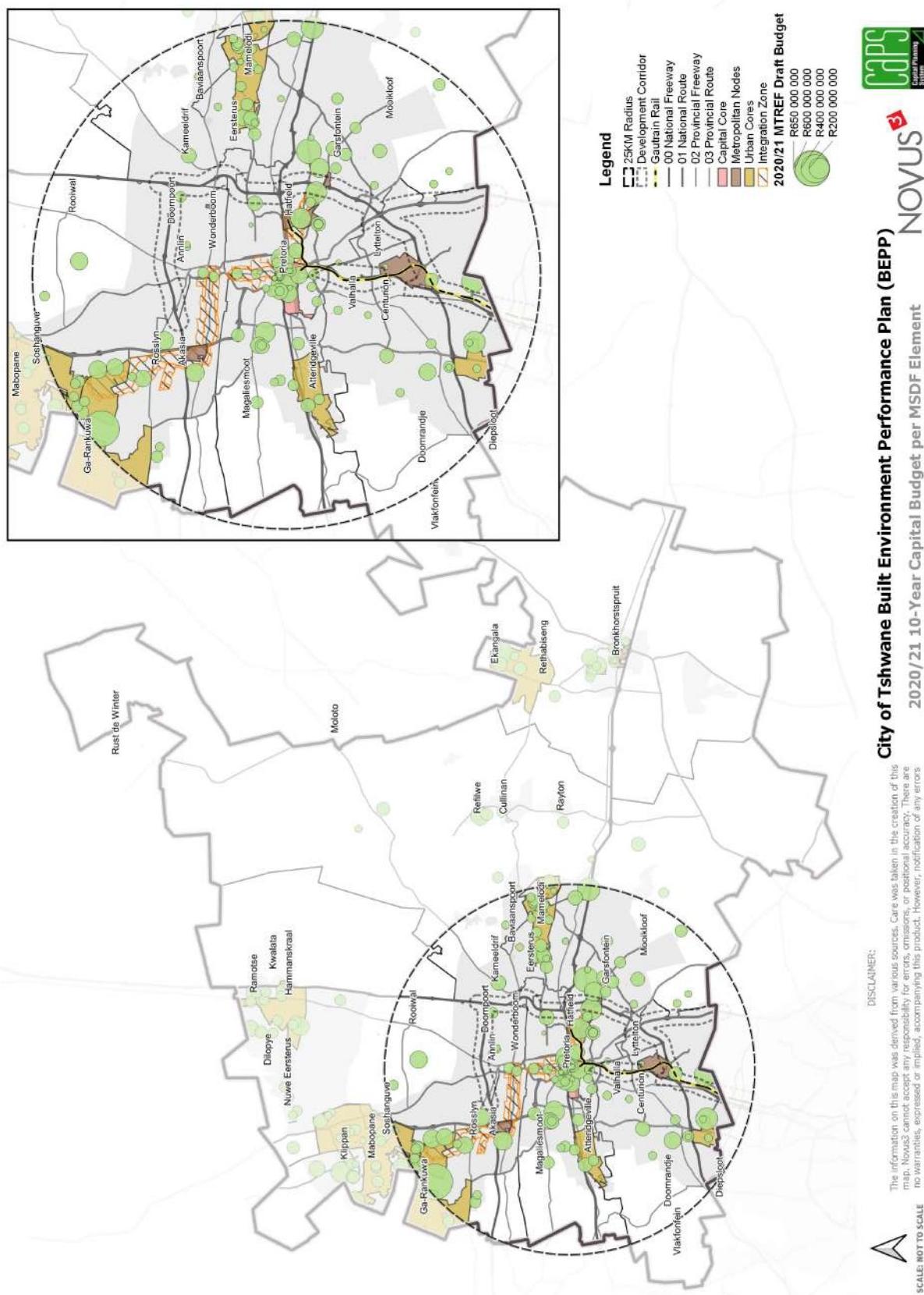
Table 29 MTREF Capital Budget MSDF Analysis (R'000)<sup>17</sup>

MSDF Elements	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF
Administrative HQ	R37	R50	R58	R145	1%
Capital Core	R60	R99	R176	R335	3%
City Wide	R891	R724	R936	R2 551	21%
Integration Zone	R987	R681	R674	R2 342	20%
Metropolitan Nodes	R32	R28	R27	R87	1%
Outside MSDF Area	R1 181	R1 216	R1 230	R3 627	30%
Urban Core Nodes	R1 015	R945	R849	R2 809	24%
<b>Grand Total</b>	<b>R4 202</b>	<b>R3 743</b>	<b>R3 949</b>	<b>R11 895</b>	<b>100%</b>

<sup>16</sup> Administrative HQ includes projects which have not been mapped spatially or projects which have invalidly been mapped outside of the City of Tshwane administrative boundary.

<sup>17</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Figure 79 Spatial 2020/21 10-year Capital Budget per MSDF Element



From the table and figure above, the following is of importance to note:

- The comparative budget analysis of the 2020/21 MTREF capital budget by MSDF nodal area indicates that the largest portion of the budget has been allocated to the Urban Core Nodes with a total of R2.8 billion (24%) of the total 2020/21 MTREF budget.
- The MSDF analysis shows that approximately R2.3 billion (20%) is within the Integration Zone for the total 2020/21 MTREF capital budget.
- A total of R3.2 billion (27%) of the 2020/21 MTREF budget is located within the Capital Core, Metropolitan Nodes and Urban Core Nodes.
- Only R87m (1%) of the 2020/21 MTREF capital budget is spatially targeted towards the Metropolitan Nodes.
- 30% of the spatially referenced MTREF capital budget does not align the above mentioned MSDF areas.

It is further noteworthy that

Figure 79 indicates a clustering of capital budget allocation outside the MSDF areas in the Magaliesmoet. This area comprises of housing and the IRPTN projects, within ward 58.

The 2020/21 MTREF capital budget partially aligns with MSDF elements with 47% of the capital allocated to the capital core, integration zone, metropolitan nodes and urban core nodes. The partial alignment of capital budget towards MSDF elements can be attributed to a number of factors of which one could include the inaccuracy of project location information. An additional factor could include the clustering of capital projects towards areas of high infrastructure backlog.

#### **19.1.3.2 Gauteng 2020/21 MTREF Capital Budget Targeting per Tshwane MSDF Element**

The Gauteng Province 2020/21 MTREF expected capital expenditure (ECE) spatial targeting analysis according to MSDF spatial structuring elements, is shown in Figure 80 and respectively Table 30.

Figure 80 Gauteng 2020/21 MTREF ECE per Tshwane MSDF (R'000)

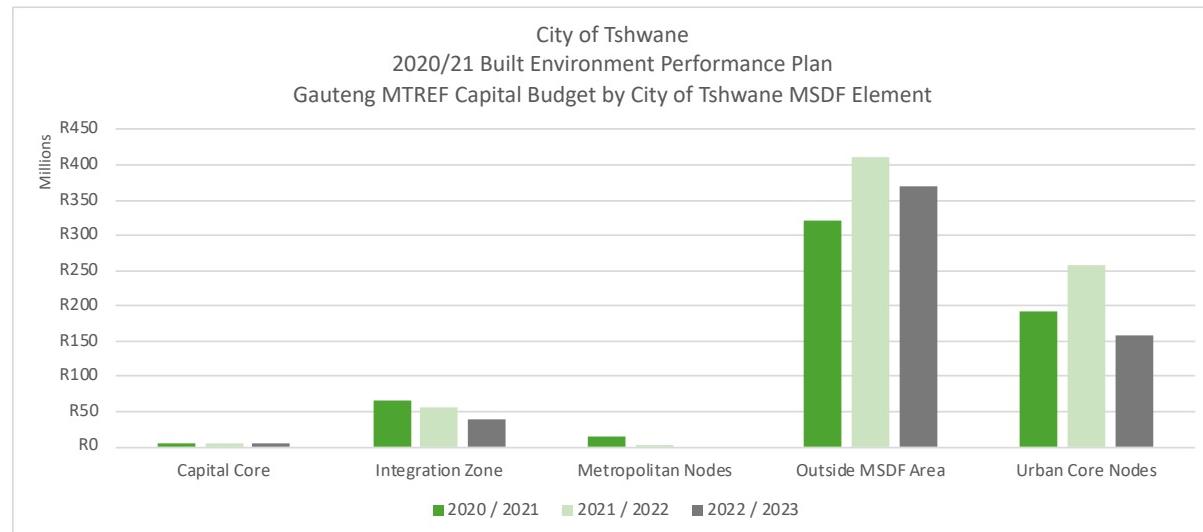
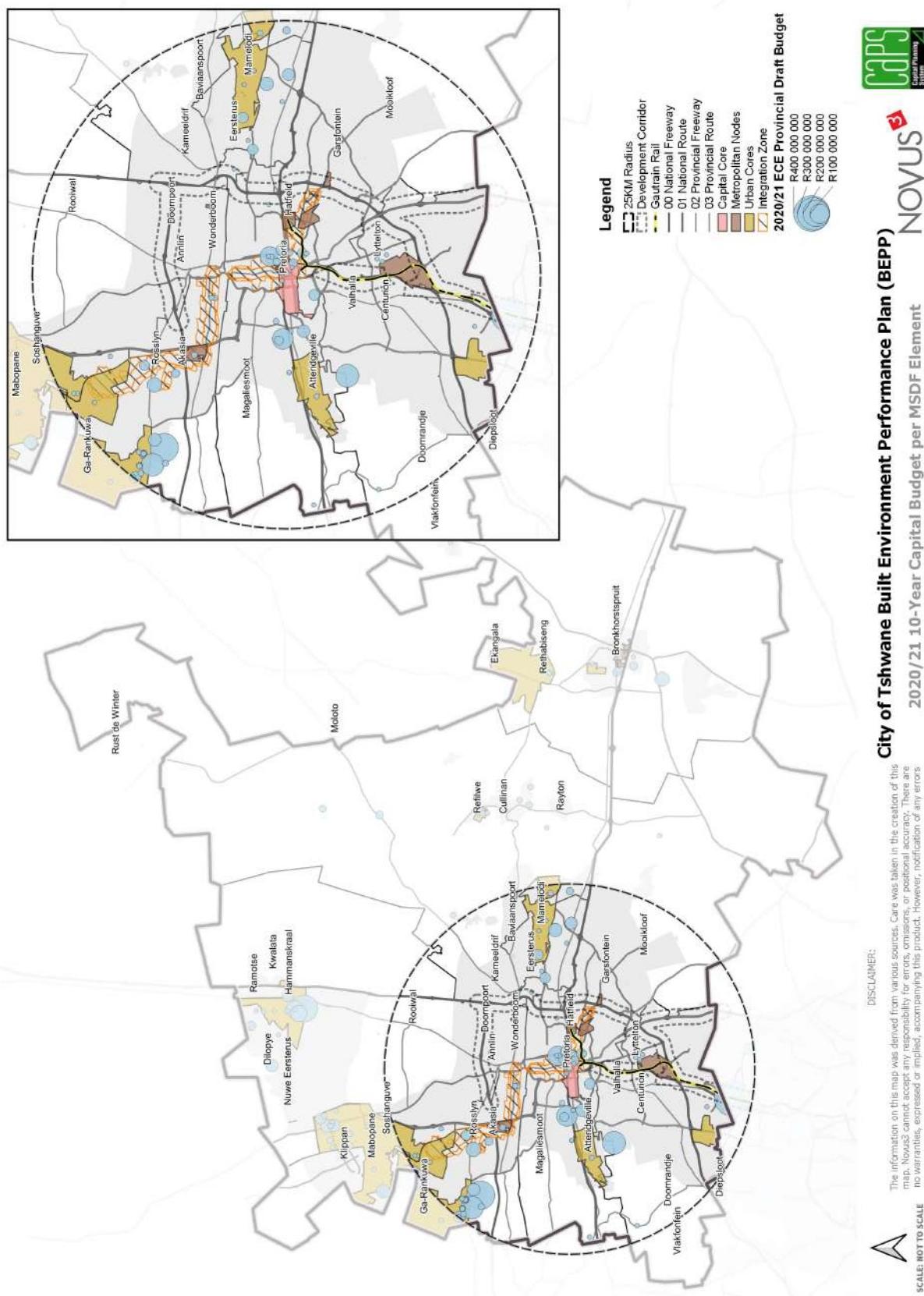


Table 30 Gauteng 2020/21 MTREF ECE per Tshwane MSDF (R'000)

MSDF / Provincial Department	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF
<b>Capital Core</b>	<b>R4</b>	<b>R4</b>	<b>R4</b>	<b>R12</b>	<b>0,6%</b>
Agriculture and Rural Development	R0	R0	R0	R0	0,0%
Education	R0	R0	R0	R0	0,0%
Health	R4	R4	R4	R11	0,6%
Human Settlements	R0	R0	R0	R0	0,0%
Roads and Transport	R0	R0	R0	R0	0,0%
Social Development	R0	R0	R0	R1	0,0%
Sports, Arts, Culture and Recreation	R0	R0	R0	R0	0,0%
<b>Integration Zone</b>	<b>R66</b>	<b>R56</b>	<b>R39</b>	<b>R161</b>	<b>8,5%</b>
Agriculture and Rural Development	R0	R0	R0	R0	0,0%
Education	R0	R0	R0	R0	0,0%
Health	R47	R54	R37	R137	7,2%
Human Settlements	R0	R0	R0	R0	0,0%
Infrastructure Development	R0	R0	R0	R0	0,0%
Roads and Transport	R0	R0	R0	R0	0,0%
Social Development	R4	R2	R2	R8	0,4%
Sports, Arts, Culture and Recreation	R16	R0	R0	R16	0,8%
<b>Metropolitan Nodes</b>	<b>R16</b>	<b>R0</b>	<b>R0</b>	<b>R16</b>	<b>0,8%</b>
Education	R0	R0	R0	R0	0,0%
Health	R0	R0	R0	R0	0,0%
Infrastructure Development	R0	R0	R0	R0	0,0%
Sports, Arts, Culture and Recreation	R16	R0	R0	R16	0,8%
<b>Outside MSDF Area</b>	<b>R322</b>	<b>R412</b>	<b>R371</b>	<b>R1 105</b>	<b>58,1%</b>
Agriculture and Rural Development	R0	R0	R0	R0	0,0%
Education	R0	R0	R0	R0	0,0%
Health	R321	R321	R292	R934	49,1%
Human Settlements	R0	R89	R78	R167	8,8%
Infrastructure Development	R0	R0	R0	R0	0,0%
Roads and Transport	R0	R0	R0	R0	0,0%
Social Development	R1	R1	R1	R4	0,2%
Sports, Arts, Culture and Recreation	R0	R0	R0	R0	0,0%
<b>Urban Core Nodes</b>	<b>R193</b>	<b>R257</b>	<b>R158</b>	<b>R608</b>	<b>32,0%</b>
Agriculture and Rural Development	R0	R0	R0	R0	0,0%
Education	R0	R0	R0	R0	0,0%
Health	R164	R136	R116	R416	21,9%
Human Settlements	R0	R94	R24	R118	6,2%
Infrastructure Development	R0	R0	R0	R0	0,0%
Roads and Transport	R0	R0	R0	R0	0,0%

MSDF / Provincial Department	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF
Social Development	R17	R16	R17	R51	2,7%
Sports, Arts, Culture and Recreation	R12	R11	R0	R23	1,2%
<b>Grand Total</b>	<b>R600</b>	<b>R729</b>	<b>R572</b>	<b>R1 901</b>	<b>100,0%</b>

Figure 81 Spatial Gauteng 2020/21 MTREF ECE per Tshwane MSDF (R'000)



The provincial allocation and planning of capital expenditure, in relation to the City of Tshwane's spatial priorities, can be better understood by cross referencing between provincial departmental capital budgets and each MSDF element as depicted in the table above. The following is of importance to note:

- 58% of the Gauteng ECE capital budget, allocated within the City of Tshwane, is located outside of the delineated MSDF areas.
- R607 million (32%) of the Gauteng ECE capital budget is allocated within the Urban Core Nodes.
- Gauteng capital budget investments within the City are from Health and is outside the MSDF Areas, with Education, Human Settlements, Social Development and Sports, totalling the large capital budget outside the MSDF areas at 9% of the total MTREF.
- The largest capital investment by Provincial department within an MSDF area is the Health department with R416 (4%) capital investment within the Urban Core Nodes.
- Although capital budget values are one way of measuring investments, the type of asset should also be taken into account and the purpose of the asset towards the area is another measure.

Provincial investment in comparison to investment made by the City within the MSDF nodes are significantly different. The portion of expenditure (7%) within the MSDF zones of Provincial capital in comparison to the portion of expenditure outside (11%) of the MSDF, suggests a different focus from to that of the City's vision.

## **19.2 Capital Expenditure Spatial Targeting by Catalytic Land Development Programme**

### **19.2.1 City of Tshwane 2020/21 MTREF Capital Budget Spatial Targeting per CLDP**

The 2020/21 MTREF capital budget spatial targeting analysis per Catalytic Land Development Programme (CLDP) area, is shown in Figure 82 and Table 31 respectively.

Figure 82 2020/21 MTREF Capital Budget per CLDP area (R'000)<sup>18</sup>

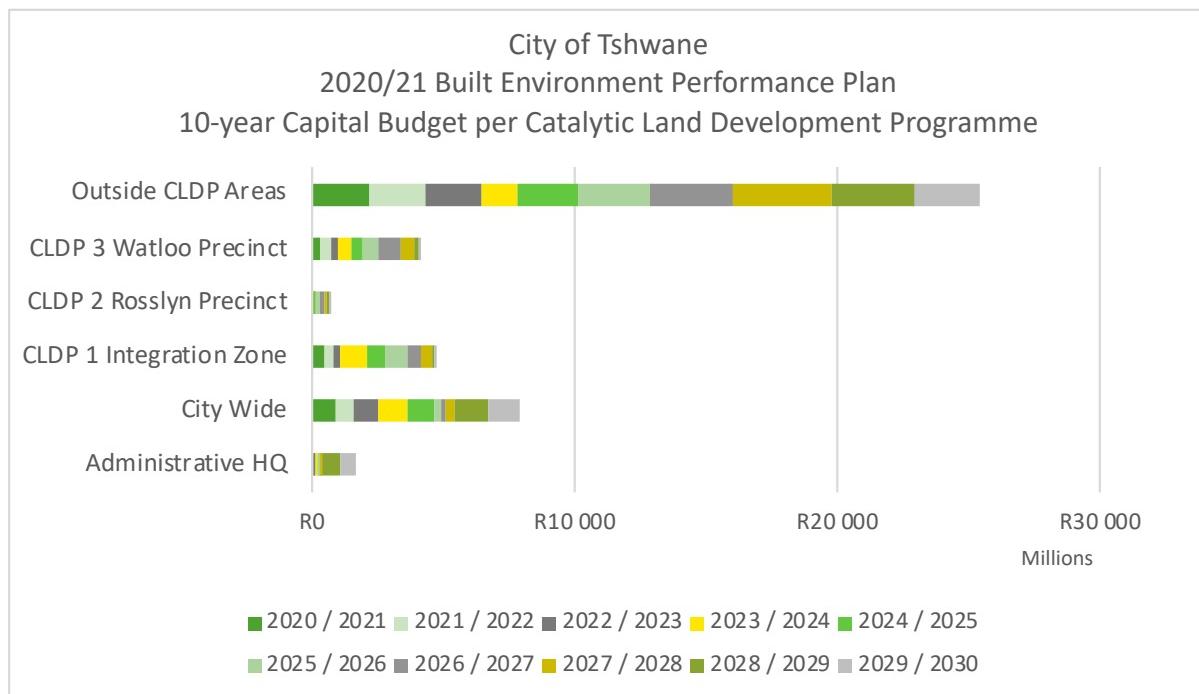


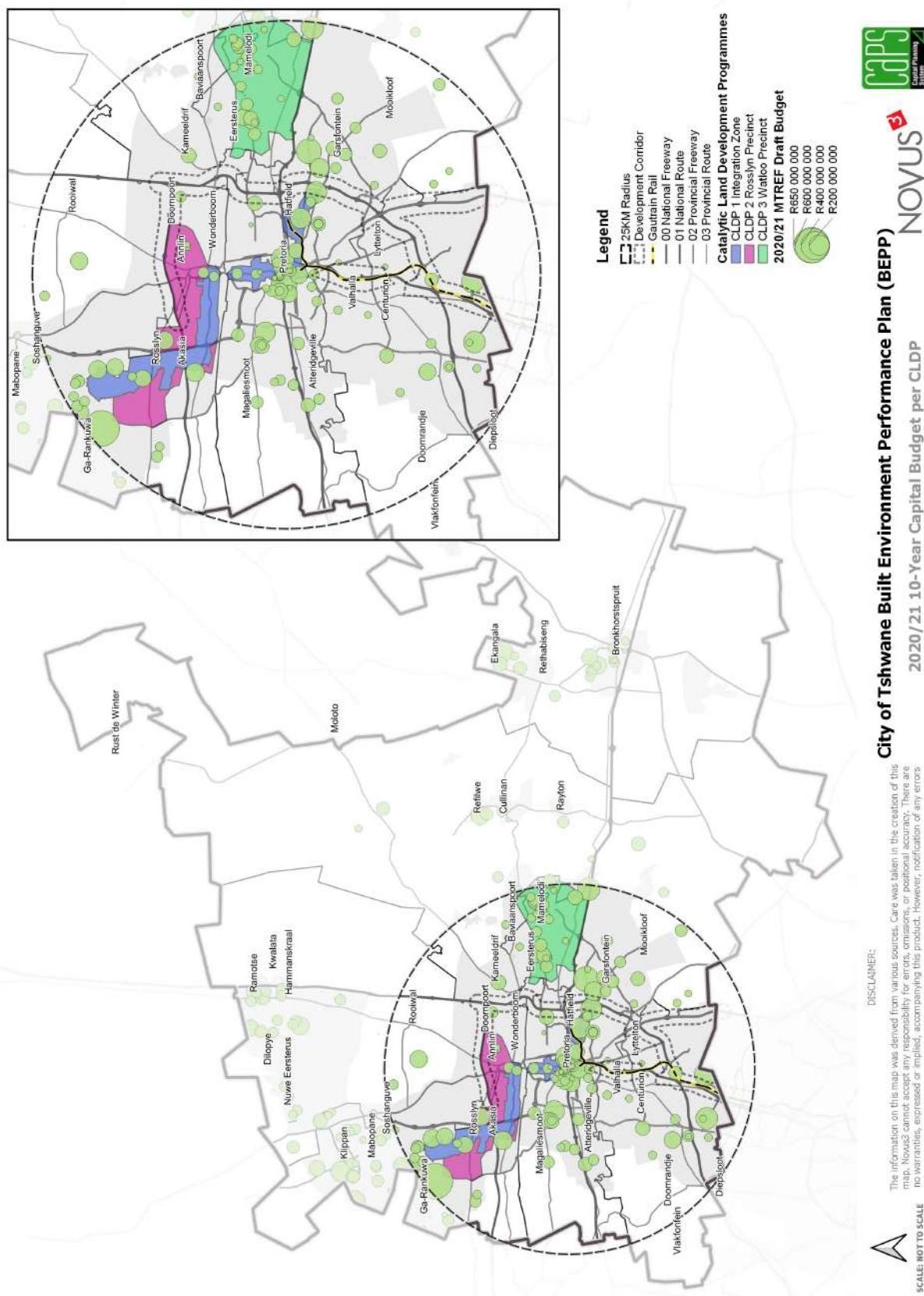
Table 31 2020/21 MTREF Capital Budget CLDP area (R'000)<sup>19</sup>

CLDP's	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF
Administrative HQ	R36	R48	R58	R142	1%
City Wide	R891	R724	R936	R2 551	23%
CLDP 1 Integration Zone	R501	R278	R338	R1 116	10%
CLDP 2 Rosslyn Precinct	R25	R6	R11	R42	0%
CLDP 3 Watloo Precinct	R342	R354	R296	R992	9%
Outside CLDP Areas	R2 199	R2 150	R2 069	R6 418	57%
<b>Grand Total</b>	<b>R3 994</b>	<b>R3 560</b>	<b>R3 707</b>	<b>R11 261</b>	<b>100%</b>

<sup>18</sup> Administrative HQ includes projects which have not been mapped spatially or projects which have invalidly been mapped outside of the City of Tshwane administrative boundary.

<sup>19</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Figure 83 Spatial 10-year 202/21 Capital Budget per CLDP area (R'000)



From the table and figure above, the following is of importance to note:

- The total capital budget allocated towards CLDP Zones is R2.1bn (19%) of the total 10-year 2020/21 capital budget.
- The flattening out of capital budget in the outer years within the 10-year horizon, highlights a concern towards future planning of spatially targeted areas within the City's capital planning process.

### 19.2.2 Gauteng 2020/21 MTREF Capital Budget Targeting per Tshwane CLDP

The Gauteng Province 2020/21 MTREF expected capital expenditure spatial targeting analysis per Catalytic Land Development Programme (CLDP) area, is shown in Figure 84 and Table 32 respectively.

Figure 84 Gauteng 2020/21 MTREF ECE per CLDP area (R'000)

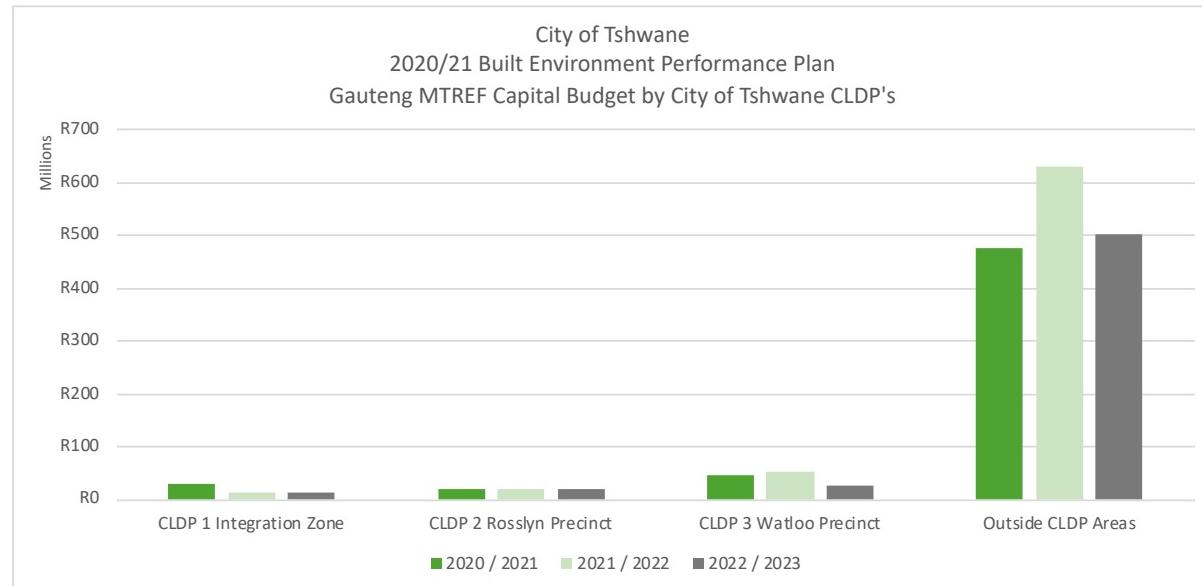
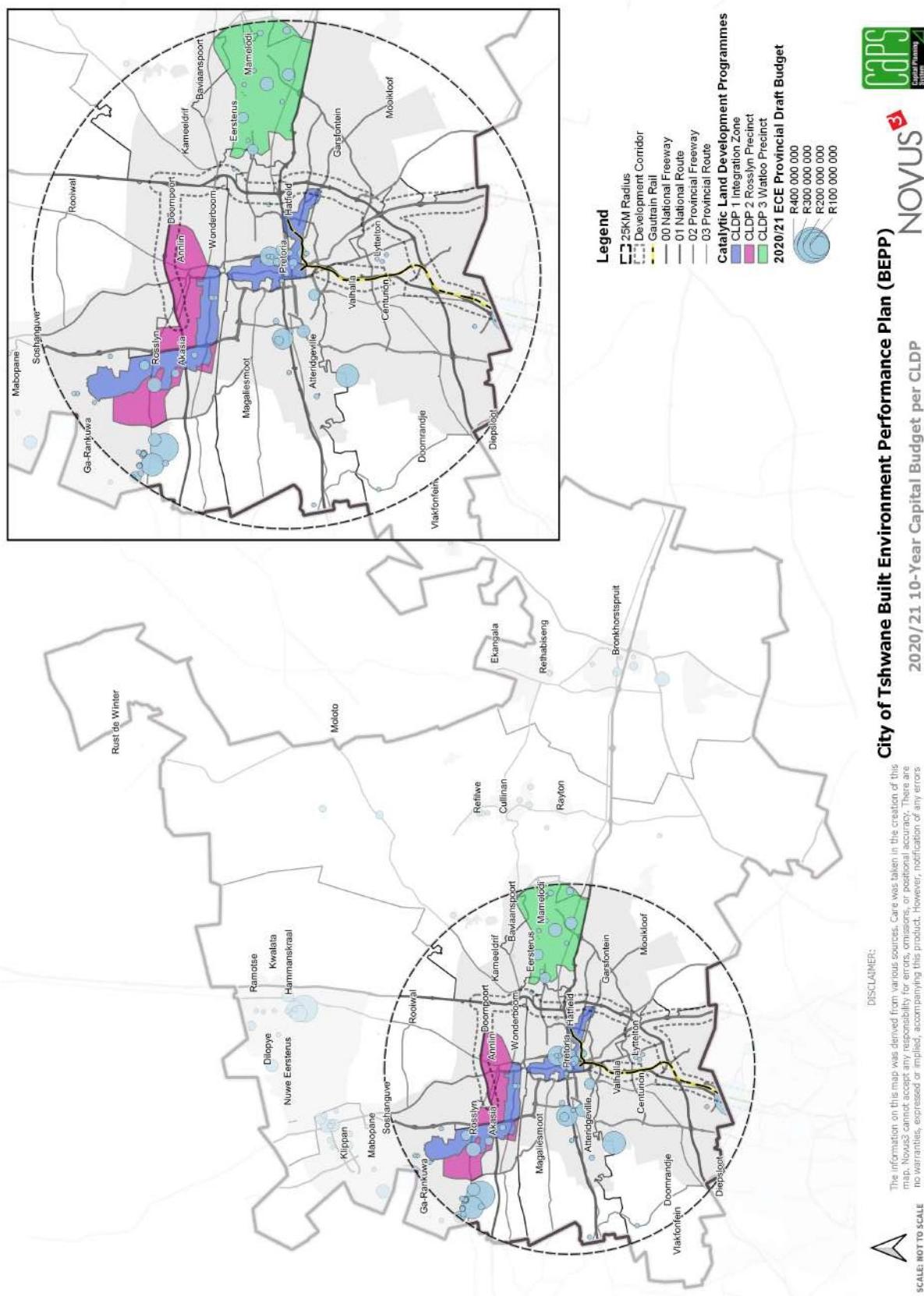


Table 32 Gauteng 2020/21 MTREF ECE per CLDP area (R'000)

CLDP Zones	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of Total MTREF
CLDP 1 Integration Zone	R29	R13	R13	R54	3%
CLDP 2 Rosslyn Precinct	R20	R20	R20	R60	3%
CLDP 3 Watloo Precinct	R46	R52	R27	R125	7%
Outside CLDP Areas	R477	R631	R501	R1 609	87%
<b>Grand Total</b>	<b>R571</b>	<b>R716</b>	<b>R561</b>	<b>R1 848</b>	<b>100%</b>

Figure 85 Spatial Gauteng 2020/21 MTREF ECE per CLDP area (R'000)



From the table above, the following is of importance to note:

- The total budget for Gauteng is R10 billion for the 2020/21 MTREF, within the City Gauteng's investment is only 12% of the budget and very evident from Figure 85 showing that most of the Gauteng Provincial budget is not spatially aligning with the CLDPs.
- From the total budget within the City, 88% of the total budget is outside the CLDP areas, with a minimal investment of R125 million (7%) in the Watloo / Silverton Precinct and collectively R101 million (5%) in the Integration Zone and Rosslyn / Wonderboom Precincts.

## 19.3 Total Budget per Asset Evaluation Criteria

### 19.3.1 Asset Type

The 2020/21 MTREF capital budget analysis by MSCOA asset classification, is shown in Figure 86 and Table 33 respectively.

Figure 86 2020/21 MTREF Capital Budget per MSCOA Asset Type

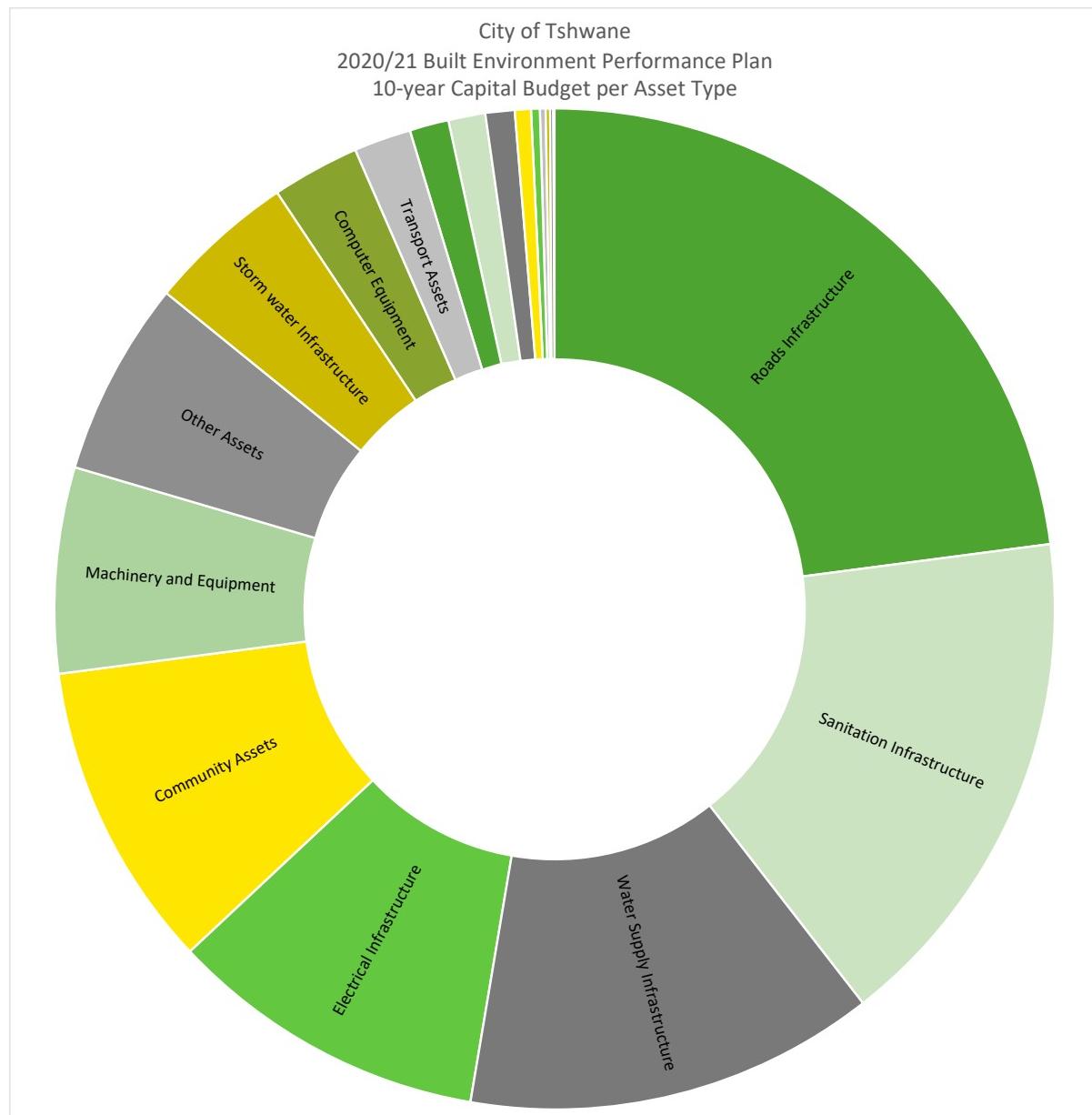


Table 33 2020/21 MTREF Capital Budget per MSCOA Asset Type (R'000)<sup>20</sup>

Asset Type	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF Total	10-year Total	% of Total
Biological or Cultivated Assets	R12	R12	R12	R35	0,3%	R75	0,2%
Coastal Infrastructure	R0	R0	R0	R0	0,0%	R15	0,0%
Community Assets	R246	R273	R272	R791	7,0%	R4 417	9,9%
Computer Equipment	R143	R87	R67	R297	2,6%	R1 256	2,8%
Electrical Infrastructure	R571	R630	R633	R1 834	16,3%	R4 559	10,3%
Furniture and Office Equipment	R16	R15	R16	R47	0,4%	R119	0,3%
Heritage Assets	R5	R5	R5	R15	0,1%	R60	0,1%
Information and Communication Infrastructure	R0	R0	R0	R0	0,0%	R522	1,2%
Intangible Assets	R0	R0	R0	R0	0,0%	R48	0,1%
Investment Properties	R188	R100	R0	R288	2,6%	R420	0,9%
Machinery and Equipment	R198	R101	R282	R581	5,2%	R2 961	6,7%
Other Assets	R106	R66	R64	R236	2,1%	R2 787	6,3%
Public Protection and Safety	R0	R0	R0	R0	0,0%	R0	0,0%
Roads Infrastructure	R1 191	R1 076	R1 157	R3 424	30,5%	R10 192	22,9%
Sanitation Infrastructure	R352	R333	R245	R930	8,3%	R7 324	16,5%
Solid Waste Infrastructure	R172	R40	R40	R253	2,2%	R575	1,3%
Storm water Infrastructure	R120	R134	R156	R409	3,6%	R2 138	4,8%
Strategic Management	R0	R0	R0	R0	0,0%	R10	0,0%

<sup>20</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Asset Type	2020 / 2021	2021 / 2022	2022 / 2023	MTREF	% of MTREF Total	10-year Total	% of Total
and Governance							
Transport Assets	R20	R60	R94	R173	1,5%	R810	1,8%
Water Supply Infrastructure	R642	R623	R660	R1 926	17,1%	R5 914	13,3%
Zoo's, Marine and Non-biological Animals	R0	R0	R0	R0	0,0%	R3	0,0%
No Selection	R0	R0	R0	R0	0,0%	R238	0,5%
<b>Grand Total</b>	<b>R3 982</b>	<b>R3 554</b>	<b>R3 701</b>	<b>R11 237</b>	<b>100,0%</b>	<b>R44 443</b>	<b>100,0%</b>

From the table above, the following is of importance to note:

- The largest benefactor of the 10-year 2020/21 capital budget is Roads infrastructure with R 10bn (23%); closely followed by Sanitation infrastructure with R7.3 bn (16.5%);
- The third largest benefactor of the 10-year 2020/21 capital budget is Water Supply with R5.9 bn (13%) followed by Electrical infrastructure with R4.5 bn (10%);
- The increase in Sanitation Infrastructure in the outer years, suggests the current priority of the city might not be towards Sanitation infrastructure but the need arises in the latter years;
- The 10-year 2020/21 capital budget allocation towards community assets (typically including libraries, community facilities etc.) with R4.4 bn (10%) of the total budget;
- A small allocation has been made to computer equipment and machinery and equipment, which fall within the moveable asset category, and;
- Concerning is the low budget allocation made to solid waste with R575 million (1.3%).

Infrastructure investment is the largest portion of the capital budget in the MTREF and in the 10-year Total budget. The significant decrease in road infrastructure from the MTREF at 30.5% to the 10-year budget at 23%, indicates the decrease in future infrastructure planning over the 10-year period.

### 19.3.2 Class Type

The 10-year 2020/21 capital budget analysis by MSCOA asset class, is shown in Figure 87 and Table 34 respectively.

Figure 87 10-year 2020/21 Capital Budget per MSCOA Asset Class (R'000)

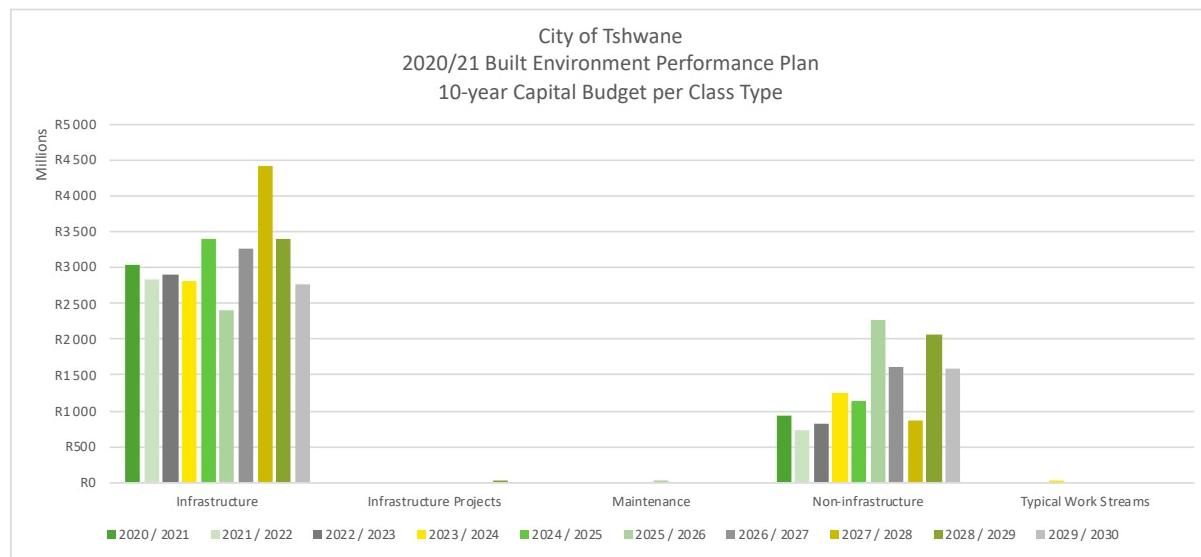


Table 34 10-year 2020/21 Capital Budget per Asset Class (R'000)<sup>21</sup>

Year	Infrastructure	Infrastructure Projects	Maintenance	Non-infrastructure	Typical Work Streams	Total
2020 / 2021	R3 048	R0	R0	R934	R0	R3 982
2021 / 2022	R2 836	R0	R0	R718	R0	R3 554
2022 / 2023	R2 891	R0	R0	R811	R0	R3 701
2023 / 2024	R2 813	R0	R0	R1 243	R10	R4 066
2024 / 2025	R3 391	R0	R0	R1 125	R0	R4 516
2025 / 2026	R2 405	R0	R5	R2 257	R0	R4 667
2026 / 2027	R3 263	R0	R0	R1 605	R0	R4 868
2027 / 2028	R4 417	R0	R0	R855	R0	R5 272
2028 / 2029	R3 410	R7	R0	R2 053	R0	R5 470
2029 / 2030	R2 760	R0	R0	R1 588	R0	R4 348
MTREF Total	R8 774	R0	R0	R2 463	R0	R11 237
<b>Grand Total</b>	<b>R31 232</b>	<b>R7</b>	<b>R5</b>	<b>R13 189</b>	<b>R10</b>	<b>R44 443</b>

From the table above, the following is of importance to note:

- Within the MTREF a total of R8 bn is allocated towards Infrastructure related projects, and non-infrastructure related assets at R2 billion of the total MTREF.
- The 10-year 2020/21 asset class budget is focused towards Infrastructure at R31 bn and non-infrastructure related assets at R13 bn.

<sup>21</sup> Draft version of the 2020/21 Annexure A (23 March 2020) was used to compile the affordability envelopes for the MTREF. These figures will be updated once the MTREF Capital Budget for 2020/21 has been finalized.

Infrastructure investment is dominant within the MTREF and the overall 10-year budget. Infrastructure assets are more costly than non-infrastructure asset and integrated planning and phasing should be taken into consideration to ensure all infrastructure investments are spatially aligning. The measure of impact on the budget should also be calculated with spatial targeting and collaborative capital investment as input to capital investment.

## 20 Institutional Arrangements

### 20.1 CaPS TTT Guidance

During the 2020/21 budgeting and reporting cycle, the CaPS TTT (refer to Section A) facilitated a number of focus sessions with departments to review and guide the project preparation process outlined in Section C. The objective of these focus session was to guide departments on the spatial and strategic priorities as outlined in the MSDF and IDP during the capital demand planning and capturing process.

The CaPS TTT hosted two rounds of one-on-one focus sessions with the following departments, which have been identified as key infrastructure and service delivery departments:

- Housing and Human Settlements;
- Roads and Transport;
- Water and Sanitation; and
- Electricity.

The first round of one-on-one sessions were held during September 2019 with the objective of communicating the budgeting and planning process for 2020/21 and to determine the planning directive within each department. These sessions also prepared departments for the capturing seasons by highlighting the information requirements and status of project information completion. In conclusion to the discussion the CaPS TTT made the department aware of common capturing errors and how to address these.

The second round of one-on-one sessions were held during October and occurred after the first capturing season. These sessions were targeted towards understanding the planning directive within each department and to guide departments to take note of the following:

- Status of project completion;
- CaPS TTT input towards the planning directive followed within departments;
- Guidelines on project planning which promotes climate change mainstreaming;
- Planning for the entire project lifecycle cost inclusive of pre-project and post-implementation operational costs; and
- Aligning to Catalytic Land Development Programmes and planning in line with the City's spatial targeting areas.

For purposes of the one-on-one sessions the CSU prepared a guideline on Climate Responsiveness and Resilience Strategic Outcomes. The agendas and guideline for round one and two of the one-on-one sessions have been included in Addendum 9.